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NECK SURGERY AS RELATED TO OTOLARYNGOLOGY

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Neck surgery in otolaryngology has not been developed to any great degree. It is open to development at present, and it is my hope that in the future increasing numbers of otolaryngologists will adopt this field of surgery as their responsibility. Some instructors not only teach neck surgery along with otolaryngology, but they also advocate that the otolaryngologist should follow a definite program of training in this field. A year in general surgery should be added to his training; in his basic subjects he should be taught gross and surgical anatomy, as well as the surgical pathology and histopathology of the neck; and, under the direction of a good teacher, he should be guided in the practical application of this knowledge.

In particular, certain features of the anatomy of the neck should be stressed, among the most important of which are the cervical fasciae. Because of their great clinical importance, the study of these fasciae in the cadaver is insufficient. The otolaryngologist should be impressed with the difference between the fasciae he sees in the cadaver and those which exist in the living body. Histogenetically, the fasciae are composed of the same type of connective tissue cells that enter into the formation of the supportive framework and the covering of the muscles, blood vessels, nerves and viscera. They are morphologically identical with the periosteum and muscle tendons and with the supportive framework of serous membranes. As a matter of fact, the fasciae cover and blend with the external coat of all the important organs of the body, i. e., blood vessels, nerves, bones, muscles and most of the viscera. The fascial interspaces serve as paths of least resistance for the spread of infection, neoplasms and foreign bodies. Only with a comprehensive knowledge of these fasciae is the otolaryngologist well fitted to perform operations on the neck.

Before proceeding, perhaps it would be well to define what is meant by the neck. It may be said, with a certain degree of safety, that the neck is the isthmus which connects the head with the body; therefore, it must be of great importance, as not only does it carry the cervical vertebrae, which support the head, but also through it pass the airway, the food passages, the great blood vessels, the lymph nodes and salivary glands and many of the cranial nerves. Even the upper end of the esophagus must be considered part of the neck. Each of these structures is subject to certain infections and pathologic changes. It is apparent, then, that the otolaryngologist's knowledge of the disorders which occur in the neck should be definite and broad in its scope. Actually, the neck may be, and often is, the seat of pathologic changes, which may produce as many surgical problems as, if not more than, any other portion of the body. Certain of these problems, which in the past have been left to the general surgeon, are now thought by many physicians to belong in the field of otolaryngology. It is increasingly important, therefore, that the otolaryngologist have adequate training in the management of these problems of neck surgery.

All too often neck surgery is thought of as applying only to those diseases which are approached by opening the neck externally, but in the true sense this is not so. For instance, a tonsillectomy is considered a surgical procedure on the pharynx; but, inasmuch as the pharynx is included with the neck, a tonsillectomy may be classified as an operation on the neck. (This example is used only for the purpose of illustrating that any discussion of neck surgery in otolaryngology should include all those structures which are part of the neck.) Stated in another way, the otolaryngologist who does not recognize the surgical procedures for tumors of the neck as just as much a part of his field of work as a tonsillectomy should at least consider this larger view of neck surgery.

It has been said that what a disease is, what it is thought to be and what it ultimately proves to be are nowhere in all pathology so well illustrated as in this part of the body. The early recognition and the proper management of the many disorders in the neck with which the otolaryngologist is frequently confronted call for a thorough knowledge of the anatomy of the regions concerned and of the diseases and injuries which may occur in them. The greatest difficulty one meets in making conclusive diagnosis is in the preoperative differential diagnosis of the lesions. In general, the most commonly encountered conditions necessitating operations on the neck fall into the following classification: primary tumors, secondary tumors, congenital diseases of the neck, infection of the salivary glands and inflammatory infections of, and traumatic injuries to, the neck.

Primary tumors of the lymph nodes are seen in cases of Hodgkin's disease, lymphosarcoma and lymphoepithelioma. In Hodgkin's disease, or Hodgkin's granuloma, there is an involvement of the lymph nodes in which one or more of them are enlarged; in the majority of cases a single node is affected, usually one

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in the posterior triangle of the neck. Many times a patient with such a condition presents himself to the otolaryngologist, with a history of acute tonsillitis or infection of the upper respiratory tract, causing the patient to think that the enlargement of the lymph node was secondary to the infection. Definite diagnosis must be made by biopsy, but surgery offers the patient little hope of a cure. In cases of lymphosarcoma, surgical intervention may be of value if the tumor is removed while it is small. Lymphosarcoma of the nodes of the neck usually appears in the posterior triangle or under the upper third of the sternocleidomastoid muscle, although later it may invade such structures as the esophagus or the larynx. Lymphoepithelioma occurs typically in the anterior triangle under the angle of the jaw, protruding under or anterior to the sternocleidomastoid muscle. In some cases, the lymphoepithelioma is preceded by a tumor of the pharynx. The termination of this tumor, if it is not removed by early operation, is a functional disturbance or destruction of the organs of the neck by direct invasion.

Secondary tumors of the neck that may be encountered include metastases from malignant growths in the buccal cavity, direct extension from the buccal cavity and metastases from lesions below the clavicle. These secondary tumors may be defined as deposits of malignant tissue lodged in lymph nodes of this region, and coming from primary tumors situated somewhere in the area of drainage. Surgical treatment of these tumors, if carried out, must be radical and extensive.

Congenital diseases of the neck occasionally produce cysts in vestigial structures, aberrant tumors (notably of the thyroid gland) and tumors of the carotid sinus. Cysts of the thyroglossal duct may extend as low as the sternal notch, and they usually end in the base of the tongue. The treatment of these growths is surgical. Branchiogenic cysts also occur. These lesions develop gradually without disturbance and may furnish the basis for malignant epithelial growths. Again the treatment is surgical; irradiation has been unsatisfactory. Branchiogenic fistulas may extend from the lateral wall of the pharynx to the skin in the region of the sternal notch. Any portion of these fistulas may exist; the opening may be near the sternum, in the middle of the area, or in the pharynx. Surgical treatment is necessary, and this must be complete. Tumors of the carotid sinus are rare and not well understood. It is important to remember in connection with these tumors that when operated on early they are easily removed, but if operation is delayed they are disposed to involve the carotid vessels and often become inoperable.

Disorders of the salivary glands also may be brought to the attention of the otolaryngologist. The physiologist would classify these glands as part of the digestive system, but the pathologist would classify them as parenchymatous glands of the neck. Various tumors, primary malignant growths and inflammatory processes may affect the salivary glands. The submaxillary and parotid glands are the ones with which the otolaryngologist has oftenest to deal because of infection and the blocking of drainage with stones; also, the tip of the parotid gland may become involved when the hair follicles or the ceruminous glands of the external auditory canal are infected.

Inflammatory infections of the neck are common. The tonsils, the cervical vertebrae, the nasal sinuses, the temporal bone and the mastoid cavity, the teeth and the esophagus and respiratory tract are often the sources of infection of the neck. Acute lymphadenitis follows an infection, usually one of the upper respiratory tract. Ordinarily, a single lymph node is involved to the extent that drainage has been blocked. Surgical treatment with incision of the skin and blunt dissection to obtain drainage is necessary. Cellulitis of the floor of the mouth (Ludwig's angina) is another infection of the neck. It may be regarded as an intensely infectious phlegmon occurring under peculiar anatomic conditions. Dental infection is the commonest cause. The surgical treatment of this condition is radical and should be undertaken early. Abscesses of the pharyngomaxillary fossa are common and usually originate from infection in the tonsil, parotid gland or tip of the mastoid process, from a retropharyngeal abscess or from vertebral caries. Dr. Harris P. Mosher described the approach to this fossa when it is infected; his is still the classic method of approach for its drainage.

Trauma of the neck includes injuries to the muscles, blood vessels, larynx and esophagus. These injuries may be slight, or they may be serious in their nature. Many times the surgeon is called on to carry out rapid surgical procedures in repairing these injuries, and he must make quick decisions in order to save a life.

It may be noted that the problems of neck surgery arising in most of the conditions just enumerated may be encountered frequently in the practice of otolaryngology, and, in many instances, they are closely related to other problems in this field. The surgical procedures on the neck associated with otolaryngology will be familiar to most practitioners, although a few deserve brief mention at this time.

In surgery of the blood vessels, the procedure with which the otolaryngologist is most concerned is ligation of the blood vessels in the neck to control hemorrhages. The vessels most commonly ligated are the common carotid artery, the external and internal carotid arteries and, at times, the lingual artery.

The King operation for the relief of abductor paralysis of the vocal cords is an important surgical procedure. This operation was created and described by Dr. B. T. King; later, it was modified by him, as well as by other surgeons, namely, Kelly, McCall, Furstenberg and Woodward, each adding something to improve the technic.

One of the most important surgical procedures on the neck is the subtotal laryngectomy for cancer of the larynx. This operation is probably the most formidable one the otolaryngologist is called on to perform, and it requires the highest degree of skill at his command. One should not undertake this procedure without thorough training in the technic.

Laryngofissure is a second surgical procedure for cancer of the larynx. It is not so formidable as a laryngectomy; nevertheless, it requires great knowledge of surgical technic.

Repair of the hypopharyngeal diverticulum is a surgical procedure which should be undertaken by the otolaryngologist. It is not too difficult a technic, but it requires the teamwork of the surgeon and an endoscopist to carry out the procedure successfully. It should be a one stage operation.

I am purposely omitting surgery of the thyroid gland from this discussion because the gland is so closely related to internal medicine that I feel its surgical

treatment should be left to one who is intimately acquainted with this field of practice and its associated problems.

Lesser types of surgery of the neck could be mentioned, but time will not permit.

CONCLUSION

The otolaryngologist should be prepared to perform more surgical procedures on the neck.

His preparation should include a comprehensive knowledge of the histopathology and surgical anatomy of the neck, with special stress on the cervical fasciae. This area may present more surgical problems than any other area in the body.

A keen knowledge of surgical technic is extremely important.

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ABSTRACT OF DISCUSSION

DR. AUGUST L. BECK, New Rochelle, N. Y.: Dr. McCaskey has called attention to the gap between the field of otolaryngology and that of general surgery. As knowledge of disease affecting the viscera of the neck has advanced, it has become increasingly evident that many abnormalities of these organs can be dealt with only through an external approach. One of the best examples is a pharyngomaxillary abscess which has eroded an artery. With such a condition, incision of the lateral pharyngeal wall through the mouth probably would promptly be fatal. The otolaryngologist should possess a thorough knowledge of the functions and diseases of the viscera in his field as well as of the anatomy of the head and neck. Thorough familiarity with the following topics as they pertain to the neck is necessary for intelligent treatment of disturbances in this region: portals of entrance of infections, descriptive and applied anatomy, symptomatology, functions of all structures in the head and neck and complications and related systemic manifestations. Basic training in general surgery is imperative, but training in general surgery without training in otolaryngology is not enough to enable the surgeon to deal intelligently and accurately with all the problems of neck surgery. I agree with Dr. McCaskey that surgery of the thyroid gland is best left in the hands of the general surgeon because of the systemic disturbances which result from its derangement. On the other hand, if the qualified otolaryngologist is familiar with the entire subject of diseases of the thyroid gland there is no reason for his not performing surgical procedures involving it. Likewise, treatment of diseases of the cervical portion of the spine is best left in the hands of the orthopedist. If infections and abscesses of the fascial plane involve the surrounding soft parts, the problem becomes one which the otolaryngologist should be best qualified to manage. Pharyngomaxillary, or parapharyngeal, infections, as well as cellulitis of the floor of the mouth, which is somewhat severer on one side, may always be reached by Mosher's approach to the submaxillary fossa. Sublingual and submental cellulitis is most easily and directly reached through the suprahyoid midline approach, and no important structures are encountered in the procedure. Infections predominant in the posterior triangle are reached through an approach in that area, behind the sternocleidomastoid muscle. In cases in which preliminary tracheotomy is necessary, the otolaryngologist is best qualified to make the decision and to perform the operation. Dr. McCaskey has pointed out that recognition of structures in the neck in the presence of disease is sometimes more difficult than recognition in a cadaver. This statement is true. One must acquire the ability to recognize swollen, inflamed, distorted and displaced structures in making surgical approaches in the living patient. The otolaryngologist with good surgical skill can equip himself to work intelligently and successfully in this field.

DR. JOSEPH W. KELLY, New York: Dr. McCaskey's paper is an excellent plea to the young otolaryngologist to qualify himself in this branch of surgery. I cannot understand why neck surgery is more open to development now than it has been at any time in the past. With the advent of the antibiotic drugs, the necessity for use of the radical procedures in treatment of infections of the neck has practically fallen into the category of the radical mastoidectomy. Ligations of the jugular veins and the procedures on the carotid sinus and on jugular vessels used in treatment of the old acute mastoiditis are gone. The cases of free and open damage to the neck accompanying infections of the floor of the mouth, with edema of the larynx and the necessity of tracheotomy, resulting in secondary pneumonia and death, have been few in the last ten years. When I remember that the last 6 patients with meningitis under my care at Bellevue Hospital recovered, I realize what a far cry the situation of today is from that of the twenties and thirties. When I read papers written by men of this society advocating the closed treatment of the periesophageal abscess, or inflammation, with penicillin and sulfonamide compounds, I wonder that it is necessary to make a special study of the fasciæ of the neck. Occasionally I now have to drain a localized abscess, but the sleepless nights of terror spent in treating infections of the neck are, in my opinon, a thing of the past. I cannot agree with Dr. McCaskey that tonsillectomy should be included with surgical procedures on the neck, nor should I consider the closing of a cleft palate in this category. Operations for extensive deep malignant neoplasms of the neck are the most discouraging in neck surgery. The surgeon suffers, and the patient suffers excruciating pain if the branchial plexus is involved. I strongly advocate dissecting a gland to make a diagnosis in cases of neoplasms of the neck. Branchial and thyroglossal fistulas and cysts, in my opinion, are well within the field. I do not know of more satisfying and satisfactory surgical results than those obtained with the proper performance of these procedures. It is almost as satisfying as removing a tracheotomy tube after an arytenoidectomy. In the surgical treatment of cancer of the larynx, less work, but more judgment, is required to perform a laryngofissure than a laryngectomy. The receptive student can be taught the technic of laryngeal surgery, but it is difficult at times for the teacher not to err on the side of conservatism. Dr. McCaskey feels that the hypopharyngeal diverticulum should be repaired in a one stage operation. I must plead guilty of doing it in one stage for convenience, but I believe that the two stage Leahy procedure is the better surgical technic. I, too, strongly urge more training in neck surgery for otolaryngologists. We at the Manhattan Eye, Ear and Throat Hospital have been trying to accomplish this for the past twenty-five years, and we are not discouraged with the result.

DR. BENJAMIN H. SHUSTER, Philadelphia: Dr. McCaskey's talk and the discussions of Dr. Beck and Dr. Kelly are of vital importance to otolaryngologists. It will do no good to discuss these topics before a meeting such as this while in hospitals the general surgeon believes that neck surgery belongs to him, the general plastic surgeon believes that rhinoplasty is in his domain and the thoracic surgeon insists that bronchoscopy is his. After such a division of the field, there is little major work left for the otolaryngologist. This problem can best be solved in the teaching schools. Unless graduate schools include in their curriculums all the topics that we as otolaryngologists believe are within our field, there will always be a question of who is to do what, and we shall get nowhere. If the schools teach students to perform certain procedures, they can say, "Our students have been trained to do this work. It is our work, and we should do it." The spectacle of an experienced otolaryngologist throwing up his hands when he is required to do a ligation in the neck or to open an abscess of the brain is not a healthy one. He may call on a younger surgeon whose ability and experience are less than his own to carry out the procedure, just because he believes he is out of his department. I believe we must assert ourselves in this matter and encourage proper training in the procedures associated with our work. Such a policy will get us the proper recognition. Proper training will not require an extra year of general surgery, as Dr. McCaskey suggests. There is too great a tendency toward piling up years of work irrelevant to the training of an otolaryngologist.

DR. HAYES MARTIN, New York: Dr. McCaskey has advised that otorhinolaryngologists take over the treatment of all surgical conditions of the neck except for the diseases of the

thyroid gland. I wonder whether he has adequately considered all aspects of the problem. So far as the treatment of benign lesions—cysts, abscesses—of the neck are concerned, any surgeon who has a knowledge of the anatomy of the neck may safely handle the problem. Unfortunately, these benign diseases and conditions are not the most important ones, and I refer particularly to cancer. In my opinion, any surgeon who undertakes an operation for cervical tumor should be competent and prepared to perform any radical procedure which may be required. The preoperative differential diagnosis of benign tumor and cancer cannot be sufficiently accurate to justify any lesser attitude. The operations which may be necessary in cases of cervical tumors, no matter how benign the growths appear in the beginning, include such procedures as wide local resection of the tumor down to the deep vessels and nerves of the neck, excision of the submaxillary salivary gland, excision of the parotid gland with dissection of the branches of the facial nerve, complete radical dissection of the neck, resection of the mandible, ligation of the major vessels of the neck and opening of the pharynx. When Dr. McCaskey advises otorhinolaryngologists to take over all surgical treatment of the neck, does he imply that they already have had previous surgical training adequate to carry out surgical procedure of this type? It appears to me that the problem is more involved and complex than the essayist has indicated. I should like to ask whether Dr. McCaskey has ever known of a case in which a surgeon has exposed a presumably benign tumor or cyst only to find an infiltrating cancer, and, lacking courage and experience to continue, has retreated and consoled himself with the alibi that the tumor was inoperable and that no matter what was done the patient would have died anyway. Many such patients later apply to cancer clinics, where the operations have to be performed again, with a greatly lessened chance of cure. In many others the tumor is found to be inoperable after the first inadequate attempt. The surgeon who operates for a cervical tumor should be prepared to do whatever radical procedure may be necessary to cure cancer. If he is not qualified by training and experience to perform such radical operations, he should not attempt surgical treatment of these tumors.

DR. CARL H. MCCASKEY, Indianapolis: I thank the discussers for the points they have brought out in this paper. You will note, when you read the paper, that one of my first statements was that a man, to qualify for this kind of surgery, should be well trained in otolaryngology and should have had at least one year's training in general surgery. As for Dr. Kelly's discussion of tonsillectomy, I included my statement as a sort of feeler, for I wanted you to realize that the tonsil is still in the neck. Dr. Martin made a good point when he said that a surgeon does not always know what he will find when he makes a surgical entrance into the neck, even for biopsy; he has some idea, but he is not always certain. Therefore, he should be so well prepared when he starts that he will be able to follow through. In most medical schools, we have been subject to the domination of the surgical department. Until we can be on our own and assume complete control of our own departments, we are not likely to get a chance to do this work.

The Intervertebral Disk Syndrome.—In 1927, Schmorl began his meticulous necropsy studies showing the high incidence (38 per cent) of displacement of the nucleus pulposus into the spongiosa of the vertebral body. Schmorl and Andrae also called attention to the cartilaginous masses found within the spinal canal, consisting of nucleus pulposus herniated through defects in the annulus fibrosus. The modern concept of the syndrome of protrusion of intervertebral disk dates from the work of Mixter and Barr, Adson, Love, Craig, Camp, Walsh, Dandy, and Bradford and Spurling. The first case of intervertebral disk herniation to be described clinically was that of Kocher in 1896. Since 1934 a voluminous literature on the subject has accumulated. The first published report of a patient operated on for protrusion of an intervertebral disk into the spinal canal was that of Oppenheim and Krause in 1909.—Lewin, Philip, M.D., *Journal of the International College of Surgeons*, March-April, 1948.

MANAGEMENT OF TICK TYPHUS (ROCKY MOUNTAIN SPOTTED FEVER) IN CHILDREN

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The prevalence, severity and high mortality of tick typhus (table 1) in the Eastern states are not generally appreciated. It is probable that the actual incidence is much higher than the number of cases would suggest. In our series of 27 patients in the pediatric age group there have been 7 deaths, a death rate of 26 per cent. Our series is probably made up largely of cases of unusual severity, since most of the patients were referred to our hospital because their condition was critical. During this same period (1943 to 1946) the national mortality rate for patients less than 39 years of age was 12 per cent. The mortality rate in North Carolina during the past two years was 31 per cent, a figure comparable to ours.

There are two possible explanations of the high death rate in North Carolina. The strain of the organism may be unusually virulent, or the cases reported to the health department may be only the most severe ones.

HISTORY AND PHYSICAL EXAMINATION

One of the biggest problems in the management of tick typhus is the establishment of the diagnosis at an early stage in the disease. The history and physical examination can be of great help in the diagnosis. Only 50 per cent of our patients gave a history of having removed an engorged tick prior to the onset of fever. This fact suggests that the contact with the tick need not be so long nor so intimate as is believed, or that there may be some vector other than the tick. No studies have been made in North Carolina to demonstrate the animals which serve as a reservoir of the disease or other arthropods which might serve as vectors.

TABLE 1.—*Rocky Mountain Spotted Fever, Cases and Case Mortality*

	1936		1937		1944		1945	
	Cases	Case Mortality, %	Cases	Case Mortality, %	Cases	Case Mortality, %	Cases	Case Mortality, %
Montana	65	23	31	13.9	5	60	2	....
Idaho	31	35.5	46	10.9	5	40	6	....
Maryland	57	14.1	33	18.2	64	25.5	67	....
Virginia	50	13.9	54	16.6	81	16.1	90	20.1
North Carolina	52	25	29	17.2	59	32	57	31.7
Total for United States	362	24	429	20	470	27.6	474	....

The incubation period in our patients, when it was known, varied from one to eight days. The prodromal period lasted from one to nine days; in only 4 patients, however, was it more than four days. Three of these patients with long prodromal periods were moderately ill, and 1 was severely ill. High temperature, severe headaches and vomiting were common in this period. During this time the Rumpel-Leede phenomenon may help to suggest the diagnosis.

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From the Departments of Pediatrics and Internal Medicine of the Bowman Gray School of Medicine of Wake Forest College and the Pediatric Service of the North Carolina Baptist Hospital.

These studies were aided by a grant from the John and Mary R. Markle Foundation.

The rash usually appears first on the extremities, but may spread so rapidly that by the time it is first noted most of the body may be involved. The rash, which is maculopapular, may become petechial and purpuric, and may even progress to gangrene. In our experience the administration of serum early in the disease modified the rash (fig. 1). The severity of the rash is an index of the severity of the disease.

Physical examination usually reveals a dehydrated and seriously ill child. The pulse is rapid, and the blood pressure is at the lower limits of normal. In addition to the rash, there is nearly always demonstrable edema which is generalized, frequently nonpitting, and not dependent (figs. 2 and 3).

LABORATORY STUDIES

Laboratory studies have been of considerable interest. Nearly all of our patients experienced severe anemia (table 2). The loss of blood did not seem sufficient to explain the anemia, and no evidences of hemolysis were noted. Though it has been said [1] that the leukocyte count is usually elevated, the white blood cells during the first seven days of the disease numbered less than

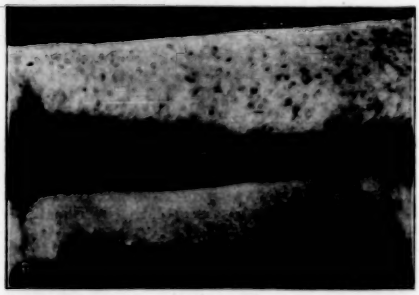

Fig. 1.—*A*, eleventh day of rash in a case of severe disease. Note the hemorrhagic character of the diffuse rash. *B*, tenth day of rash in a case in which serum therapy was used. Note discrete papules.

10,000 in 85 per cent of our cases. Later in the disease the white blood cell counts rose above 10,000 in the majority of patients. In many cases it was felt that the leukocytosis was associated with the appearance of secondary bacterial infections or followed hemorrhagic phenomena. The differential count showed an average of 70 per cent polymorphonuclear leukocytes regardless of the total number of white cells. Twenty per cent of the polymorphonuclear leukocytes were nonsegmented.

The microprothrombin time was determined in 5 patients. In 3 of these patients it was normal. One patient, who had a normal prothrombin time on admission, received prophylactic oral doses of vitamin K, 1 mg. daily for five days. At that time the prothrombin time was 2 minutes against a control of 14 seconds; when this test was repeated the prothrombin time was 3 minutes against a control of 18 seconds. After 1 mg. of vitamin K was given parenterally, the time returned to normal and remained so. The fifth patient had a slightly elevated prothrombin time on admission. One day later the prothrombin time was 2 minutes and 30 seconds, in comparison with a control of 19.5 seconds. The prothrombin time remained at this level for five days in spite of the daily parenteral administration of 4 mg. of vitamin K.

The total serum proteins (table 3) tended to be low, and dropped below 5 Gm. per hundred cubic centimeters in 14 patients. The serum albumin fell below the critical edema level of 2.5 Gm. per hundred cubic centimeters in 6 cases (table 3). Blood levels of nonprotein nitrogen and chlorides were determined on admission. Thirty per cent of these patients had non-

Fig. 2.—Patient M. D. on sixteenth day of rash. Note the pronounced edema with closure of the eyes.

protein nitrogen levels above 40 mg. per hundred cubic centimeters. Fifty-five per cent of this group had blood chloride levels below 92 milliequivalents per liter (table 3).

Blood volumes were determined by the "Evans blue" technic [2] and extravascular fluids by the thiocyanate method.[3] The blood volumes tended to be low at the peak of the disease. The large amounts of fluid present in the extravascular spaces, particularly during the edematous stage, corroborated our impression [4] that the loss of fluids from the vascular spaces was even greater than had been expected and supported the hypothesis

Fig. 3.—Patient M. D. after recovery. Note subsidence of edema.

that this fluid shift is a factor in the production of the peripheral vascular collapse. These studies will be reported at a later date.[4a]

1. Nelson, W. E.: Mitchell-Nelson Textbook of Pediatrics, ed. 4, Philadelphia, W. B. Saunders Company, 1945, p. 503.

2. Gibson, J. G., Jr., and Evelyn, K. A.: Clinical Studies of Blood Volume: Adaptation of Method to Photoelectric Microcolorimeter, J. Clin. Investigation **17**: 153-158 (March) 1938.

3. Crandall, L. A., Jr., and Anderson, M. X.: Estimation of State of Hydration of Body by Amount of Water Available for Solution of Sodium Thiocyanate, Am. J. Digest. Dis. & Nutrition **1**: 126-131 (April) 1934.

4. Harrell, G. T.; Venning, W., and Wolff, W. A.: The Treatment of Rocky Mountain Spotted Fever, J. A. M. A. **126**: 929-934 (Dec. 9) 1944. Harrell, G. T.; Wolff, W. A., and Venning, W.: A New Approach to Basic Supportive Therapy in Rocky Mountain Spotted Fever, J. South. M. A. **38**: 367-371 (June) 1945.

4a. Harrell, G. T., and Aikawa, J. K.: The Pathogenesis of Circulatory Failure in Rocky Mountain Spotted Fever: Alterations in the Blood Volume and Thiocyanate Space at Various Stages of the Disease, Arch. Int. Med., to be published.

The cerebrospinal fluid was examined in 8 patients. No abnormalities were noted in 2 cases, and in 2 others the only finding was increased pressure. Three patients showed 11 to 22 mononuclear cells in the spinal fluid as the only evidence of intracranial involvement. In 1 patient the fluid was obtained under increased pressure, and the protein content was elevated. In 1 patient who had two negative spinal fluid examinations there were severe sequelae, manifested by pronounced mental retardation and behavior disorders.

Table 2.—*Hematologic Data at the Peak of the Disease*

Patient	Age, Years	Hemoglobin, Gm. per 100 Cc.	Red Blood Cell Count	Hematocrit, Vol. per Cent	White Blood Cell Count	Polymorphonuclear Cells, %
L. D.	8	9.2	3,800,000	32	19,600	90
G. H.	15	9.0	2,720,000	29	10,900	86
R. W.	15	9.0	3,010,000	22	5,800	..
W. M.	4	9.0	4,000,000	..	20,650	87
P. B.	3	10.2	.....	30.5	11,300	39
D. D.	7	7.7	3,310,000	..	13,800	90
B. D.	2	8.0	2,020,000	..	10,750	61
H. N.	3	8.6	3,000,000	36	11,850	38
M. E.	11	10.5	3,620,000	..	9,000	84
D. O.	2	9.5	3,650,000	22.5	13,000	75
B. C.	12	10.4	4,200,000	..	16,700	82
D. K.	6	10.0	.....	30	9,000	..
I. S.	7	11.0	3,600,000	34	25,200	..
T. S.	10	13.0	4,700,000	34	13,850	67
A. B.	14	9.5	3,270,000	30	8,850	77
B. R.	1	11.5	4,200,000	33.5	10,500	..
B. D.	3	6.6	2,000,000	21.5	20,150	91
M. I.	4	9.2	3,250,000	..	30,150	77
C. M.	12	13.0	3,580,000	40	26,650	83
G. D.	15	11.1	3,620,000	32	4,500	95
D. H.	7	8.5	2,700,000	26	12,300	62
P. T.	12	10.5	4,140,000	42	8,850	55
D. B.	3	Died on admission				
P. B.	7	14.0	5,550,000	41	16,450	93
J. R.	14	10.5	3,400,000	..	6,400	74
M. D.	4	10.0	3,000,000	34.5	9,700	..
C. S.	4	10.5	3,520,000	..	16,600	80

Two serologic tests are of value in confirming the diagnosis of Rocky Mountain spotted fever. A positive reaction to the Weil-Felix test confirms the presence of a rickettsial disease, but does not differentiate clearly between murine typhus and tick typhus. A persistently negative reaction to the Weil-Felix test helps to exclude tick typhus. The complement fixation test is specific for tick typhus. These serologic tests are diagnostic only when the titer rises during the course of the illness. They are of no value early in the disease, since the titer does not reach diagnostic levels before convalescence. The highest titers in our patients were obtained against Proteus OX-19, though in 1 patient who died the OX-2 and OX-K strains gave reactions in higher titer. Three patients had positive complement fixation reactions [5] for murine typhus, though in all of these the titers with tick typhus were higher.

CLINICAL COURSE AND COMPLICATIONS

The clinical course of the disease was fairly constant. There were no deaths in patients who survived more than fourteen days after the onset of fever. The duration varied from eight to twenty-eight days, the average being twenty-one days. We were unable to predict the outcome from the appearance of the patient when first seen. Two critical periods were common: at the time of admission and on the tenth day of the rash. Electrolyte disturbances and shock occurred early in the disease; later, peripheral circulatory collapse and pneumonia were common.

Few diseases have so many complications as tick typhus. Peripheral circulatory collapse is the most common. A rising pulse rate, especially if it goes above 140, is an indication of impending trouble. The appearance of a thready pulse and a drop in the blood pressure are ominous signs. Peripheral circulatory collapse usually occurs when the edema is maximal, although it may take place earlier in the disease if dehydration is severe. It sometimes develops so suddenly that recognition at an early stage is made possible only by frequent and careful examinations. Sixty per cent of our patients, and all of those who died, had circulatory collapse some time during the illness.

Though none of our patients had definite evidence of cardiac failure, this may occur. Any increase in venous pressure, a gallop rhythm or enlargement of the liver should make one suspect that there is severe myocardial involvement. Pneumonia has been a common and severe complication, and it is difficult to differentiate this from cardiac failure. Forty-five per cent of our patients had clinical or pathologic evidence of pneumonia. Pneumonia was thought to be a major factor in 4 of the 7 deaths in our series.

Nearly all the patients had signs of involvement of the central nervous system. Coma, delirium and fine tremors of the hand were common. Neither the clinical findings nor the spinal fluid studies enabled us to predict which children would be left with permanent damage to the nervous system. Fortunately, only 1 patient had any neurologic sequelae.

PATHOLOGY

The pathologic findings in tick typhus have been well described.[6] In our cases the most striking lesions were seen in the myocardium, lungs and brain. Though the heart usually showed mononuclear cell infiltration, there was in no case evidence of cardiac dilatation. Three pathologic lesions were seen in the lungs. Two patients had bronchopneumonia of bacterial origin. In 2 cases extensive mononuclear cell infiltration was seen in the interstitial spaces. One patient had diffuse alveolar and interstitial hemorrhage.

Table 3.—*Blood Levels of Chlorides, Nonprotein Nitrogen and Proteins*

Patient	Age, Years	Blood Levels of Chlorides and Nonprotein Nitrogen on Admission: Chlorides, MEq. per Liter	Blood Levels of Chlorides and Nonprotein Nitrogen on Admission: Nonprotein Nitrogen, Mg./100 Cc.	Lowest Blood Levels of Proteins During Illness: Total Serum Proteins, Gm./100 Cc.	Lowest Blood Levels of Proteins During Illness: Serum Albumin, Gm./100 Cc.
J. R.	14	79	64	4.5	3.3
D. H.	7	85	46	4.3	...
G. D.	15	87	45	5.2	4.0
R. W.	15	82	86	4.8	2.1
L. D.	8	95	42	5.4	2.9
D. O.	2	80	60	3.4	1.7
C. S.	4	91	31	6.9	3.9
P. B.	7	97	38	3.9	2.4
P. T.	12	85	29	5.4	2.2
M. I.	4	85	77	4.4	2.2
R. D.	3	99	32	5.3	2.7
A. B.	14	90	32	5.1	...
D. K.	6	88.5	30	5.0	...
W. M.	4	91	29	5.7	3.6
D. D.	7	92	34	4.9	3.2
H. N.	3	82	37	5.3	2.7
B. D.	2	99	35	4.9	2.6
G. H.	15	85	25	4.6	2.6
B. C.	12	99	24	5.2	2.1
M. E.	11	90	25	4.5	...

The lesions in the brain were those of a diffuse encephalitis. Perivascular infiltration with mononuclear cells was found in the cerebral cortex, basal ganglia, pons and medulla. Occasionally there was a hemorrhage in the brain substance. Petechial hemorrhages were found in the pia-arachnoid.

We feel that peripheral circulatory collapse is a frequent cause of death. This collapse is probably due to the shift of fluids from the vascular to the extra-

5. Complement fixation tests were performed by the National Institute of Health.

6. Lillie, R. D.: The Pathology of Rocky Mountain Spotted Fever, National Institute of Health Bulletin 177, Federal Security Agency, United States Public Health Service, 1941.

vascular spaces, with a concomitant decrease in the blood volume. The two mechanisms probably responsible for this shift of fluids are reduction in the colloid fraction of the blood and leakage of fluids through damaged blood vessels. There are several possible explanations for the lowered protein value of the serum.

TABLE 4.—*Patients Treated with Hyperimmune Rabbit Serum*

Patient	Age, Years	Total Dosage, Cc./kg.	Doses	Time Given: Days' Fever	Time Given: Days' Rash	Duration of Disease, Days	Result
B. R.	1	3.0	3	3	½	8	Serum sickness; recovered
L. S.	7	2.0	2	3	½	20	Recovered
D. D.	7	0.5	1	3	1	14	Recovered
W. M.	4	2.0	2	2	1	22	Recovered
T. S.	10	2.0	2	3	½	17	Recovered
P. B.	7	1.5	2	5	3	..	Died
C. S.	4	3.5	3	5	1	..	Died
R. W.	15	1.0	2	12	0	15	Recovered
P. S.	3	1.0	1	3	2	20	Recovered
J. R.	14	1.0	1	6	2	17	Serum sickness; recovered

In many cases the patient is so sick that he is unable to maintain an adequate protein intake unless aided by gavage feedings. Indirect evidence suggests that the synthesis of proteins in the liver may be impaired. Small amounts of protein are lost in the urine, and protein may be lost into the tissue spaces through the damaged vascular system. Studies of nitrogen balance indicate that there is a tremendous increase in protein catabolism. Since sodium and potassium are important in determining the partition of fluids in the body spaces, abnormalities in their distribution may be a factor in the fluid shifts in tick typhus.

SPECIFIC THERAPY

Two types of specific therapy are now available: hyperimmune rabbit serum [7] and para-aminobenzoic acid. In our experience, hyperimmune serum [8] has not proved to be of great value, even when given in amounts up to 1 cc. per kilogram of body weight daily for three days. Large doses of serum have not yet been given an adequate trial, however. Nine of our patients received serum within the first three days of the rash (table 4). The rash was probably modified in 5 patients. There was no definite decrease in the duration of the illness, though it was felt that at least 2 patients may have had a less stormy course than would have been expected without the serum. The mortality in the serum-treated group was 25 per cent. Because of the scarcity of the serum in 1944 and 1945, only the sickest patients were treated with it.

The value of para-aminobenzoic acid in tick typhus has not been definitely determined, since only 22 cases of tick typhus treated with the drug have been reported in the literature [9] (table 5). Though it is difficult to evaluate any form of therapy in such a variable disease, it was felt that the drug modified the course of the disease in all the reported cases. A similar modification was noted in cases of louse-borne typhus [10] and scrub typhus [11] treated with para-aminobenzoic acid. The evidence which has accumulated is sufficient to warrant its extensive clinical trial. Experience with laboratory animals [12] and with human patients indicates that the drug does not kill the rickettsias but inhibits growth. One would therefore expect the drug to be most effective if given early in the disease, and animal experimentation bears out this expectation.[13] Probably levels of 30 to 50 mg. per hundred cubic centimeters should be attained in the blood.[9f] Two toxic effects have been noted with high blood levels of para-aminobenzoic acid: The carbon dioxide–combining power may decrease moderately, and leukopenia of a mild degree may occur.

We have treated 3 patients in our hospital and 1 patient in another hospital with para-aminobenzoic acid (table 6). All were treated late in the course of the disease, and were critically ill. Three of the patients died, and the fourth survived after a stormy course. None of these patients offered a fair trial for the drug.

SUPPORTIVE THERAPY

Supportive therapy is directed at the prevention of cardiovascular complications and pneumonia and at the maintenance of nutrition. Those patients who were dehydrated at the time of admission and had an elevated nonprotein nitrogen level and a low blood chloride level were given calculated amounts of isotonic solution of sodium chloride intravenously until the urinary flow returned to normal. Those patients who had nitrogen retention but normal blood chloride levels received calculated amounts of 5 per cent dextrose in water intravenously. No more than 20 cc. of fluids per kilogram of body weight was given in any single intravenous injection. When signs of peripheral vascular

TABLE 5.—*Reported Cases of Tick Typhus Treated with Para-Aminobenzoic Acid*

Authors	Age, Years	Day of Disease, from Onset of Fever, on Which Patient Was: Treated	Improved	Well	Highest Blood Levels of Para-Aminobenzoic Acid, Mg./100 Cc.
Rose, Duane and Fischel [9a]	46	5	8	15	16.6
Maroney and Davis [9b]	3	12	14	16	10.0
Hendricks and Peters [9c]	4	12	14	14	8.8
Graham and Ross [9d]	6	13	16	18	Not stated
Flinn and others [9e]	3	13	..	17	29.0
	6	7	..	9	10.5
	11	8	..	11	6.5
	11	7	..	12	23.5
	22	6	..	7	22.1
	38	4	..	6	26.6
	37	3	..	6	Not obtained
	12	9	..	12	48.0
	36	6	..	11	30.0
	67	8	Died 17	..	60.0
Ravenel [9f]	17	9	10	13	47.0
	4	7	12	10	68.0
	10	7	8	9	21.0
	3	4	½	5	Not stated
	5	6	9	14	120.0
Peterson and others [9g]	7	5	Died 6	..	Not stated
	7	4	..	6	Not stated
	7	12	..	15	Not stated

7. Topping, N. H.: Rocky Mountain Spotted Fever (Further Experience in the Therapeutic Use of Immune Rabbit Serum), Pub. Health Rep. **58**: 757-775 (May 14) 1943.

8. Serum furnished by Lederle Laboratories of the American Cyanamid Company.

9. (*a*) Rose, H. M.; Duane, R. B., and Fischel, E. E.: The Treatment of Spotted Fever with Para-Aminobenzoic Acid, J. A. M. A. **129**: 1160-1161 (Dec. 22) 1945. (*b*) Maroney, J. W., and Davis, H. C.: Rocky Mountain Spotted Fever: A Case Treated with Para-Aminobenzoic Acid, Delaware State M. J. **18**: 104-106 (May) 1946. (*c*) Hendricks, W. J., and Peters, M.: Spotted Fever Treated with Para-Aminobenzoic Acid, J. Pediat. **30**: 72-75 (Jan.) 1947. (*d*) Graham, G. S., Jr., and Ross, C. S.: Rocky Mountain Spotted Fever: Case Report and Discussion of Therapy, J. M. A. Alabama **16**: 289-293 (March) 1947. (*e*) Flinn, L. B.; Howard, J. W.; Todd, C. W., and Scott, E. G.: Para-Aminobenzoic Acid Treatment of Rocky Mountain Spotted Fever, J. A. M. A. **132**: 911-915 (Dec. 14) 1946. (*f*) Ravenel, S. F.: Para-Aminobenzoic Acid Therapy of Rocky Mountain Spotted Fever, ibid. **132**: 989-994 (April 5) 1947. (*g*) Peterson, J. C.; Overall, J. C., and Shapiro, J. L.: Rickettsial Diseases of Childhood, J. Pediat. **30**: 493-528 (May) 1947.

10. Yeomans, A.; Snyder, J. C.; Murray, E. S.; Zarafonetis, C. J. D., and Ecke, R. S.: The Therapeutic Effect of Para-Aminobenzoic Acid in Louse Borne Typhus Fever, J. A. M. A. **126**: 349-356 (Oct. 7) 1944.

11. Tierney, N. A.: Effect of Para-Aminobenzoic Acid in Tsutsugamushi Disease, J. A. M. A. **131**: 280-285 (May 25) 1946.

12. Anigstein, L., and Bader, M. N.: Para-Aminobenzoic Acid: Its Effectiveness in Spotted Fever in Guinea Pigs, Science **101**: 591-592 (June 8) 1945.

13. Snyder, J. C.; Maier, J., and Anderson, C. R.: Report to the Division of Medical Sciences, National Research Council, Dec. 26, 1942.

collapse were present, concentrated albumin, whole blood, plasma or red blood cells were given, the choice of therapy depending on the total serum proteins, the hematocrit reading and the blood volume; plasma and whole blood were the agents most frequently employed in this situation. If clinical signs suggested cardiac failure, no intravenous fluids were given and the patient was digitalized rapidly.

When there is the slightest evidence of pneumonia, penicillin should be administered in generous amounts. Although some experiments [14] suggest that penicillin may inhibit rickettsial growth, the aim of penicillin therapy in tick typhus is the prevention of bacterial pneumonia. We have the impression that penicillin may have saved a few patients in whom this complication might otherwise have proved fatal.

Every effort should be made to maintain a high protein intake. In some cases as much as 7 Gm. of protein per kilogram per day is needed to keep the patients in positive nitrogen balance. Most children with this disease are unable to take the amount and type of food required to maintain their nutrition, and should receive gavage feedings as soon as they refuse the diet. This procedure tires the patient less than prolonged attempts to feed him, and incidentally saves nursing time. Since the liver may not be able to utilize amino acids, proteins should also be given intravenously, in the form of plasma or whole blood. The patients in our series have left the hospital in good nutritional condition. Six children gained weight during the illness; 7 lost not over 5 per cent of their body weight, and the remainder were discharged weighing the same that they did on admission. None of these patients had clinical or laboratory evidence of edema at the time of discharge.

TABLE 6.—*Patients with Tick Typhus Treated with Para-Aminobenzoic Acid at the North Carolina Baptist Hospital*

Patient	Age, Years	Day of Disease, from Onset of Fever, on Which Patient Was			Highest Blood Levels of Para-Aminobenzoic Acid
		Treated	Well	Died	
G. D.	15	8	..	9	Not obtained
C. S.	4	13	..	15	74 mg. per 100 cc.
J. R.	14	9	18	..	50 mg. per 100 cc.

COMMENT

Though we have no proof that this vigorous approach to supportive therapy has lowered the mortality rate of tick typhus significantly, we have the impression that several patients recovered who would have died without these supportive measures. The most urgent problem at present is to find a procedure which will permit the diagnosis to be established before the appearance of the rash. Until an early diagnosis is possible, no form of specific therapy can be entirely satisfactory.

SUMMARY AND CONCLUSIONS

The clinical and laboratory findings in 27 children with tick typhus are described.

While treatment with specific hyperimmune rabbit serum and para-aminobenzoic acid did not lower the mortality rate significantly, it is felt that neither of these agents was given an adequate trial.

Vigorous supportive therapy is credited with saving several patients who otherwise would have died. Children maintained on a high intake of proteins and vitamins were discharged in good nutritional status. Until it is possible to establish the diagnosis of tick typhus earlier than at present, supportive therapy in this disease will be necessary.

In North Carolina tick typhus is a serious disease carrying a high mortality rate in children.

14. Moragues, V.; Pinkerton, H., and Greiff, D.: Therapeutic Effectiveness of Penicillin in Experimental Murine Typhus Infection in dba Mice, J. Exper. Med. 79: 431-437 (April) 1944.

ABSTRACT OF DISCUSSION

DR. DAVID M. GREELEY, New York: I am a little more optimistic than Dr. Kelsey is concerning the use of para-aminobenzoic acid, but I agree that, if it is to be effective, it has to be used early. Several careful clinical and metabolic studies have been done on patients suffering from both louse-borne typhus and Rocky Mountain spotted fever. The work by Dr. Kelsey and Dr. Harrell and his group at Winston-Salem and of the Cairo-Egypt unit of the American Typhus Commission has done much to elucidate the alterations which take place in the fluid, electrolyte and nitrogen balances and has helped to explain some of the clinical phenomena. The principal pathologic changes in louse-borne typhus and Rocky Mountain spotted fever are in the endothelial and smooth muscle cells of the smaller blood vessels of skin and subcutaneous tissue. The invasion of these cells by rickettsias result in intervascular thrombi and necrosis of these blood vessels. The permeability of these vessels is increased, and this in turn leads to extravasation of blood into the tissue spaces and accounts for the typical hemorrhagic rash which occurs in both of these diseases. In addition to the formed elements of the blood which are lost in the tissue spaces, fluid, chlorides and plasma proteins are lost, resulting in a situation analogous to that which occurs in patients who have been severely burned. The shift in the chlorides and plasma albumin from the blood to the tissue spaces alters the osmotic pressure relationships and gives rise to edema. There follows a reduction of blood volume with a lowering of the blood pressure and the effective glomerular filtration pressure. The latter, coupled with the tremendous destruction of body protein, gives rise to the prerenal azotemia. The principal cause of death, then, in peripheral vascular collapse is easily explained. For a time, the supportive treatment of Rocky Mountain spotted fever included the use of intravenous fluids; then, after a period, it was felt that such treatment was contraindicated. This belief arose because it had been noted that animals treated with intravenous fluids died more quickly and that patients treated in a similar manner did less well than control groups not treated with intravenous fluids. But in these instances, solutions of dextrose and sodium chloride were used, and it is now clear that such solutions will quickly pass into the tissues, thus intensifying the changes which have been described. However, much can be accomplished in selected cases by the intravenous administration of large amounts of blood plasma, albumin or whole blood, which will tend to raise, or at least prevent, a further drop in the plasma proteins; the blood volume will be increased, the blood pressure will rise and, along with it, the glomerular filtration pressure. As a result, there will be less tendency for the development of peripheral circulatory collapse and nitrogen retention. It has been noted, both in louse-borne typhus and Rocky Mountain spotted fever, that patients so treated do much better than control groups. The nitrogen retention in Rocky Mountain spotted fever is due primarily to the great destruction of body protein. However, if large amounts of protein are given by mouth or by gavage, this loss can be curtailed, and in some instances a positive nitrogen balance can be obtained.

DR. CHARLES ARMSTRONG, Washington, D. C.: The name of this disease is Rocky Mountain spotted fever, not tick-borne typhus. If one says tick-borne typhus, one might mean Rocky Mountain spotted fever; one might mean boutonneuse, the Mediterranean type, or if one is speaking of mite-borne typhus, one might mean tsutsugamushi or rickettsial pox. Let's stick to the name Rocky Mountain spotted fever. Nothing will be gained by writing tick-borne typhus and then Rocky Mountain spotted fever in parentheses. These patients were seen after the rash first appeared. That is really the first definite diagnostic symptom. But if one waits until the appearance of the rash, one is not seeing the case or making a diagnosis early.

I think that something can be gained by a carefully taken history; a history of a bite with engorgement of the tick about seven to twelve days prior to the onset of the symptoms may give an inkling of what to expect before the appearance of the rash. And then one should, if one suspects Rocky Mountain spotted fever, get serum available so that one can start specific treatment, at the first appearance of the rash. It might be well also to remember that there is an effective vaccination available against this disease, which may be used in especially exposed persons. In Montana, the incidence of the disease has dropped until in 1945 there were but 2 cases reported. This year, there has not been a single case of the disease reported in the state. These results are, I think, largely due to the widespread use of the vaccine in that part of the country.

DR. WESTON M. KELSEY, Winston-Salem, N. C.: I believe that the name tick typhus is better than Rocky Mountain spotted fever for several reasons. Many practitioners have been misled in the diagnosis since they feel that it is a geographically limited disease. Unsatisfactory as it is, tick typhus correlates the vector with the disease as do the names murine typhus and louse-borne typhus. I admit that the terminology is unsatisfactory. The big problem is prophylaxis, especially in the pediatric age group where ticks are not recognized and removed before they have become attached. The question of just how to approach the public health problem in a rural area, such as North Carolina, remains unanswered. It has been difficult instituting programs for routine immunization, not to mention immunization against tick typhus, which would require contact with the patients every year.

THE MEANING OF CANCER RESEARCH

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While the human body is a beautifully organized, well governed society of cells, probably no living species is a victim of more disorders and maladjustments than man. From study of the behavior of the various disorders much has been learned about the orderly, normal behavior of living units, i. e., cells, organs and systems. So far as communicable diseases are concerned, it is now axiomatic that they are manifestations of cellular reactions to external parasitic organisms (bacteria, protozoa or viruses). The reactions show a process of adaptation between two living variables, the mammalian cell host and the invasive parasitic agent. This process is essentially a struggle for survival, and it may end in the death of the host, the death of the parasite, the death of both or a compromise through which host and parasite manage to live together satisfactorily. Basically, the cancer process is no exception. It, too, is a movement toward the goal of all living things, survival.

That cancer is essentially the result of a process of cellular adaptation is suggested by the gradual, steplike change in the behavior of cells when they are transformed into the neoplastic stage. Under some conditions, but not all, cancer cells are tougher and have greater survival value than the homologous normal cells.[1] It is also commonly observed that cancer in the terminal stages of the disease will continue to increase in weight, while the rest of the body is wasting away. In experiments with animal transplantation, cancer implants are seen to elicit a richer supply of blood vessels from the host than implants of normal tissues, and they are also seen to assume a rate of multiplication superior to that of the surrounding normal tissue.[2]

Under the influence of the brilliant researches of the last seventy-five years, which have revealed that many human diseases are due to a single invasive parasite, investigators were misled in their search for a single cause of cancer. Not one of the numerous descriptions of parasites as the cause of cancer has withstood the test of time.

What is the status of present knowledge of the carcinogenic process? Cancer research has reached the stage at which the following affirmations can be safely made:

1. The inciting causes of cancer are multiple and complex. In fact, cancers now may be induced experimentally at will by (*a*) genetic manipulations, i. e., inbreeding, selecting and cross breeding; (*b*) injection or feeding of any of several hundred chemicals, some of which are organ specific; (*c*) hormonal imbalances and disturbances; (*d*) many of the energy agents (roentgen rays, gamma rays of radium and ultraviolet rays), especially in animals that are subjected to interval exposure to these agents, and (*e*) a combination of two or more of the aforementioned factors. Recently, Copeland and Salmon,[3] of the Alabama Polytechnic Institute, reported cancer in rats due to a simple dietary (choline) deficiency. It seems unmistakably clear that no single specific agent or condition or any single combination of agents or conditions is responsible for the initiation of all types of cancer.

2. Mammalian cancer cells are derived from normal cells. Pathologists without exception now agree on this point.

3. Certain precancerous conditions (warts, moles, papillomas and leukoplakia) are recognized, and no sharp line of demarcation can be drawn between the precancerous and the cancerous process. In contrast, there is no preinfectious process among the communicable diseases.

4. Cancer cells are not supplied with nerves from the host, although they elicit from the host an abundant blood supply and a supporting stroma of connective tissue. This property has been taken as additional evidence of the autonomous nature of cancer.

5. A greater variety of species is subject to the carcinogenic process than to any other disease. Spontaneous cancers have been described in insects, birds, fish, reptiles and amphibians, as well as in man, mice, rats, rabbits, dogs, cats, cattle, hogs, sheep and many other mammals. Yet each cancer is species specific. Cancer cells, like normal cells, cannot be implanted successfully in a foreign species except under highly artificial conditions.

6. Cancer reveals itself as a special type of cell behavior, peculiar to organized multicellular forms. A cancer is a group of disorganized cells. Every biologist who has observed the marvelous processes of cell differentiation and organization in any developing multicellular embryo wonders not that there is occasional evidence of disorganization, but that there is not more of it.

7. Cancer is not, as often stated, a "universal cell potentiality" because what is now called cancer cannot manifest itself in a single cell species. While free-living

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Read in a Symposium on the Present Status of Cancer Research before the Section on Pathology and Physiology at the Ninety-Sixth Annual Session of the American Medical Association, Atlantic City, N. J., June 13, 1947.

1. Brues, A. M., and Jackson, E. B.: Cancer Research **1**: 557-563, 1941.

2. Algire, G. H., and Chalkley, H. W.: J. Nat. Cancer Inst. **6**: 73-85, 1945.

3. Copeland, D. H., and Salmon, W. D.: Am. J. Path. **22**: 1059-1079, 1946.

single cell organisms are considered potentially immortal, as long as the environment is favorable and there is an adequate food supply, the life span of all multicellular individual organisms is definitely limited, even under the most favorable conditions. Continuity of life is maintained in multicellular forms through sexual reproduction. Death and extinction seem the penalties for the privileges and advantages of organized multicellularity. To put it another way, multicellularity seems to carry the seeds of its own destruction. A biologist would not claim this is true of all organized systems; but it is suggestive, and I know of no multicellular living thing that lasts forever.

Some investigators think the cancer process is related to the aging process, which may be defined as a gradual and, at present, an apparently inevitable process of disorganization and disintegration. Yet the disorganized cells known as cancer resemble, in many respects, youthful, embryonic tissue rather than cells that are old.

DEFINITION OF CANCER

It is difficult to define the cancer process. Can it be defined as an abnormal type of growth that serves no useful purpose? No, it cannot, because the body possesses many vestiges, as well as numerous moles, warts and benign growths, which serve no useful function. These structures and lesions are not cancers. Is autonomous, unlimited growth characteristic of cancer? No, it is not, because normal cells display unlimited growth when cultivated artificially in flasks and provided with an ample food supply. They do not produce cancers when again implanted in the animal body. Are the invasion and destruction of other tissues peculiar to the cancer process? Not at all. Normal leukocytes invade other tissues, and the so-called trophoblasts in the early stages of pregnancy invade and erode the body of the uterus. Is the ability to spread to other parts of the body and form metastatic tumors a characteristic quality of cancer? Certain tumors, such as the basal cell carcinoma of the skin and the tumors of the brain, do not metastasize. They are none the less malignant. Thus, it is not possible to pigeonhole cancer or to choose any one quality peculiar to the cancer cell.

When one attempts to summarize present knowledge of the carcinogenic process, one finds that much has been learned concerning what the late Dr. James Ewing called "the causal genesis" of cancer, i. e., the multiple external and internal environmental agents and conditions that start the carcinogenic process but are not essential thereafter to its continuation. On the other hand, little has been learned about the nature of the permanent intracellular change that takes place when normal cells are transformed into cancer cells, or what Ewing termed the "formal genesis." Many theories have been advanced to explain this intracellular change. It has been ascribed to the stimulating effect of latent intracellular viruses activated by the various inciting environmental factors mentioned previously, to the "hybridization" of an intracellular virus and the mammalian cell, to somatic mutations, to altered enzyme patterns and to modified mitochondria. But, regardless of the known inciting factors in the "causal genesis," and regardless of the various theoretic explanations of the "formal genesis," in every case of cancer the end result is essentially the same. Cancer is a process in which certain cells of an organized cell group have become parasitic on and finally fatal to the mother organism. These cells are truly traitors from within, in contrast to those responsible for the communicable diseases, which are all invasive gangster cells (bacteria, protozoa, viruses) from without. If cells become parasitic solely because they are activated by latent intracellular viruses, as some believe, it is necessary to postulate the existence of almost as many viruses as species and individual organisms, since each spontaneous cancer is species specific and largely individually specific. The phrase "individually specific" means that a spontaneous cancer arising in an individual organism of any species cannot be transplanted successfully, as a rule, to other individual organisms of the same species, unless one is dealing with highly inbred strains of animals, the members of which are as nearly alike as identical twins.

Although I hesitate to introduce new terms, one may think of cancer as an "autoparasite," in order to set it apart from the communicable diseases caused by external parasites. Perhaps the term "autosite" contrasts better with "parasite," but "autosite" has already been applied to the independent member of parasitic twin monstrosities. It is interesting that some cancers do possess characteristics which can be thought of as belonging to a latent parasitic twin, the production of which is without question an abnormality of the developmental process.

In attempting to classify cancers or to describe adequately the cancer process, one must remember there are no complete dichotomies anywhere in biology, but, rather, that there exists an almost imperceptible gradation in form and function, from the most primitive of organisms to the most complex.

UNIQUE QUALITIES OF CANCER

No two cancers seem identical in either causation or behavior. The parts played by heredity, by hormones, by diet, by external environmental conditions are seldom the same in cancers of different organs. The well known coal tar product methylcholanthrene seems to induce a cancer in practically any mammalian tissue in which pellets of this insoluble hydrocarbon are placed. On the other hand, among the several hundred chemicals which induce cancer when injected into or fed to animals, another coal tar product (beta-naphthylamine) when given to dogs causes cancer of the bladder only.

The azo dyes will induce cancers of the liver only when fed to rats and mice and compounds of relatively simple chemical structure (chloroform and carbon tetrachloride) also induce cancer of the liver, but not of other tissues.

An alkaloid (contained in ergot) [4] fed to rabbits for two years caused neurofibromas on the ears only. Tumors of the kidney followed the injection of a synthetic organic chemical (beta-anthraquinoline).[5] Urethane,[6] another synthetic organic compound, caused an increase in incidence of spontaneous tumors of the lung in a certain strain of mice, from less than 5 per cent to more than 75 per cent. Interestingly, the same drug has been used with good results temporarily in the treatment of human leukemia.[7]

Gordon [8] showed that the spotted platyfish (Platypoecilus maculatus) when mated to a member of its own species produces spotted but perfectly normal young. A swordtail (Xiphophorus hellerii) mated to a swordtail also produces normal young. But, when a per-

4. Nelson, A. A.; Fitzhugh, O. G.; Morris, H. J., and Calvery, H. O.: Cancer Research 2:11-15, 1942.
5. Semproni, A., and Morelli, E.: Am. J. Cancer 35:534-537, 1938.
6. Nettleship, A., and Henshaw, P. S.: J. Nat. Cancer Inst. 4:309-319, 1943.
7. Paterson, E.; Thomas, I. A.; Haddon, A., and Watkinson, J. M.: Lancet 2:677-682, 1946.
8. Gordon: Am. Scholar 1:489-491, 1932.

fectly healthy black-spotted platyfish is mated to an equally healthy Mexican swordtail, hybrid fish are born in which melanotic tumors invariably appear. If an unspotted platyfish is used in a hybrid mating, the disease will not appear. The spotted condition in the platyfish is inherited from one generation to another with a definite mathematic precision.

Sharrer [9] observed that in the insect Leucophaea maderae the removal or injury of the recurrent nerve from the frontal ganglion of the sympathetic nervous system caused tumors to grow in the organs supplied by this nerve. The disturbance of endocrine balance as a factor was ruled out. The insects with tumors died in ten days to several months. Death was apparently due to starvation from obstruction of the alimentary canal.

Little and his group [10] at the Jackson Memorial Laboratory, Bar Harbor, Maine, showed that in 100 per cent of a series of castrated newborn mice (male and female) of a certain strain cancers of the adrenal gland developed after the age of 13 months. Yet the same operation has been employed by Huggins of the University of Chicago,[11] in the treatment of cancer of the prostate in old men. Of 20 patients, in each of whom the cancer had spread to other parts, 18 showed improvement and 4 remained completely free from symptoms for five years after the operation. It is not likely that castration would be helpful in the treatment of all forms of cancer, but why did some of these patients with prostatic cancer respond so favorably and others did not? At present no one knows, but the results suggest there is no "cure-all" and that each cancer is a law unto itself, and differs from all others, even those arising in the same tissue.

Among patients at Veterans Administration Facility, Hines, Ill., Shrek [12] observed that the incidence of cancer of the skin in white men is nearly seven times as great as in Negro patients. The records obtained among veterans also support the observation of many investigators that cancer of the skin in the white race occurs in the southern states much more frequently than in northern states.

The effects of the nutritional factors involved in the origin of experimental cancer are so variable that it seems impossible at present to form any general conclusions. However, Tannenbaum,[13] of Michael Reese Hospital, Chicago, reported that statistics obtained from life insurance companies suggested that among persons who were overweight at the time of the issuance of the policy there was a greater proportion of deaths from cancer than among persons who were of average weight or underweight. Tannenbaum also showed that in experimental animals a restricted diet will reduce the incidence of many different types of spontaneously occurring tumors, including leukemias. These observations provide leads, at least, toward methods of prevention.

CANCER RESEARCH AS AN ACTIVATOR

In my opinion, all the observations on the biology of cancer which have been slowly and painstakingly acquired during the past three or four decades, largely by the efforts of organized groups or what has been termed "interdisciplinary research," set cancer apart from other forms of so-called biologic maladjustments. Cancers and the neoplastic conditions cannot logically be classified with any other group of diseases. Investigators are finding that the problem of cancer is unique in many ways. The acceleration of cancer research since the late war has been due not only to generous federal and private financial support, but also to the fact that the cancer process, involving as it does problems in cell division, in metabolism, in regeneration and in the differentiation and organization of tissues, is of deep interest to all workers in experimental biology and medicine. No other disease problem has created such widespread interest among nonmedical investigators.

Thus, cancer research is activating numerous other fields of biology, and herein lies, I think, its basic importance and its true meaning. The group of fifteen distinguished experts appointed by the Division of Medical Sciences of the National Research Council for the American Cancer Society, whose duty is to recommend the allocation of funds for cancer research, is significantly called the "Committee on Growth." This designation recognizes that the cancer process is basically a problem in growth, and a study of growth leads naturally into practically every field of biology.

The extent to which the funds for the study of cancer are now supporting research in fundamental disciplines may be realized simply from a listing of the panels and sections set up by this committee. In the section on biology are panels on botany, cellular physiology, human genetics, experimental genetics, morphogenesis and viruses. In the section on chemistry are panels on cytochemistry, enzymes, experimental endocrine physiology, nutrition, proteins and synthesis and metabolism of steroids. In the section on chemotherapy are panels on bioassay, chemical-biologic coordination and the mechanism of action. There are two other sections, on clinical investigations and physics, with appropriate panels. Thus, the problem of cancer has stimulated research in many fundamental sciences.

THE POSSIBLE YIELD OF CANCER RESEARCH

In the history of science, time after time experiments designed to solve a specific problem have yielded unexpected, and sometimes highly significant, results. I am certain such results will mark the expanding program in cancer research. I trust a reference to a personal experience which illustrates this principle in a small way will be forgiven. Some years ago my associates and I began to study the effect of cancer-inducing agents on free-living, single cell species, exposing them continuously for long periods covering many generations.[14] It was believed that permanent morphologic changes might gradually be produced. Such changes were not obtained, but these studies gave information which subsequently enabled us to establish through reproducible experiments three principles involved in the mechanism of cellular adaptation to unfavorable environments. We found that continuous exposure to conditions which were apparently harmless to individual organisms and cultures would be fatal in time to the species. On the other hand, a discontinuous and alternating exposure to the same conditions resulted in survival and adaptation. Lastly, we observed that the ability of organisms to resist unfavorable environments was a function of their age or maturity. Unexpectedly, these experiments gave a better insight into the mechanisms by which living organisms survive or adapt to unfavorable environments. It is certain that the survival of the single cell, the multicellular organism and the species is never coextensive, and, therefore,

9. Sharrer, B.: Proc. Soc. Exper. Biol. & Med. **60**: 184-189, 1945.
10. Little, C. C.: Cancer Research **3**: 220-226, 1943.
11. Huggins, C. B.: Prostatic Cancer Treated by Orchiectomy: Five Year Results, J. A. M. A. **123**: 576-581 (June 15) 1946.
12. Shrek, R.: Cancer Research **4**: 119-127, 1944.
13. Tannenbaum, A.: Relationship of Body Weight to Cancer Incidence, Arch. Path. **30**: 509-517 (Aug.) 1940.
14. Spencer, R. R.: Tr. New York Acad. Sc. **8**: 135-137, 1946.

one must always hold in mind that what may be to the best interest of an individual is not necessarily to the best interest of the race or species. Race preservation, rather than self preservation, may be the first law of nature.

The release of atomic energy and the development of the atom bomb has deepened the faith of people the world over in the power of science. Indeed, these achievements have caused many to expect from biologic science too much, too soon. However, in the course of a few decades, and when a large number of talented young men and women can be recruited into the ranks of biologic research, I believe that the generous support of the public for cancer research will be justified in the results—perhaps in the by-products alone. The potentialities of new observations are not always realized.

I think I can speak for many investigators, though perhaps not all, in saying that the scientific method is more than just a working method and a means to an end. I am sure that many scientists hold these truths to be self evident:

1. The scientific method is the most effective tool man has ever devised for cutting into the facts of life and uncovering the secrets of nature.

2. The scientific method is a discipline and a way of life—the only way of life that has received universal approval.

3. Science is the only trustworthy custodian of truth in the world today.

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IDENTIFICATION OF MALIGNANT TISSUES

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A problem of considerable importance in practical pathology, as well as in cancer research, is the identification and classification of malignant tissues. The characterization of tissues as malignant or cancerous derives from a biologic conception of these states; yet in most laboratories of pathology the distinction is based solely on morphologic considerations. Thus, the assessment of properties and potentialities becomes an interpretation of fixed appearance, rather than a judgment based on actual behavior.

Morphology indicates character, but the proof of malignancy lies in behavior. Many tissues and tissue states bear a remarkable resemblance to cancer, but their fate in the organism and their significance to it place them in entirely different categories. Early embryonic tissues frequently resemble cancer so closely that the distinction cannot be made on the basis of a histologic examination of a section, and the definition depends on the fact that in the primary host and in experimental animals, embryonic tissues undergo differentiation while cancerous tissues do not. In like manner, the morphologic characteristics of productive inflammatory foci or of exuberant granulation tissue may lead to a diagnosis of sarcoma. Yet removal of the stimulus restrains proliferation and controls the lesion.

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By far the more important group, however, are the neoplastic lesions representing developmental stages of cancer rather than the fully evolved autonomous growth capable of invasion and metastasis. Cancer is not the result of a sudden transformation of normal cells but, on the contrary, represents the final stage in a developmental process. The various stages of this process cannot be distinguished from their product with any degree of consistency on purely morphologic grounds, but the difference in biologic behavior is always of a major order. This difference is evident to the clinician who observes recovery of a patient after the surgical removal of a lesion diagnosed as cancer by the pathologist or who follows a patient with a morphologic diagnosis of cancer for years before metastasis occurs. The surgical pathologist's opinion in such cases is, of course, not a diagnosis at all, but a prognosis.

The distinction between cancer and its developmental stages or other morphologically similar tissue states is particularly evident to the biologist who studies the reactions of the tissues to transplantation. The reactions to transplantation of several of the commoner tissues are shown in the table. It will be noted that only embryonic tissue and cancer tissue survive heterologous transfer. The heterotransplantability of embryonic and cancer tissues accents their biologic relation. This observation is of considerable interest in itself; but for present and practical purposes, it is important to note only that reactions to transplantability constitute a biologic test for cancer. If the tissue in question grows in an animal of alien species, it is either embryonic tissue or cancer, and, even with present knowledge of gross pathology, the surgeon ought to be able to manage this phase of the distinction.

Heterologous transfer offers a basis for the biologic diagnosis of cancer and is also of value in the classification of tumors. A laboratory report describing a metastatic tumor as disorganized and anaplastic is of little use to the clinician in his search for the primary site, but such a report interprets the microscopic picture and represents the limitations of present technics in surgical pathology. Fortunately, the growth of such tumors in lower animals is associated with a higher degree of cellular differentiation and structural organization than that present in the parent cancer, and study of the transplants allows a more precise classification than is warranted from the morphologic features of the biopsy specimen.

The technic of heterologous transfer is extremely simple. The anterior chamber of the eye is used as a transplantation site, and the guinea pig is the animal of choice. After application of a 5 per cent aqueous solution of cocaine to induce anesthesia, the chamber is opened close to the upper border of the corneoscleral junction by means of a short, quick jab with a double-edged corneal knife. A small amount of fluid is allowed to escape, and a fragment of tumor measuring approximately 0.5 mm. in diameter is introduced into the chamber. Insertion of the tumor fragment is facilitated by the use of a trocar provided with a tight-fitting plunger and a short-beveled extremity. The fragment is then forced into the inferior angle of the iris by applying light pressure with a blunt instrument along the corneal surface. The corneal incision is not closed.

It is essential that judgment be employed in selecting fragments for transfer, for growth cannot be expected if necrotic material or scirrhous tissue representing desmoplastic reaction is used. Examination of frozen

sections is often helpful in locating desirable portions of the specimen. It should be emphasized that only cancer tissue will survive heterologous transplantation. Benign tumors and so-called precancerous lesions fail to grow and rapidly disintegrate or undergo hyalinization.

The tissue need not be transplanted immediately after operation, for it will survive at ice box temperature for several days. It is possible, therefore, to preserve representative fragments in sterile Petri dishes, until routinely fixed sections have been prepared and examination suggests the desirability of further study.

The guinea pigs are not subjected to special treatment before or after transfer, but they are maintained

Transplantation Reaction

Type of Tissue	Type of Transfer		
	Autologous	Homologous	Heterologous
Normal adult	+	+	–
Normal embryonic	+	+	+
Benign tumor and developmental stages of cancer	+	–	–
Cancer	+	+	+

under ordinary conditions of cage life. Neither their age nor sex appears to influence the incidence of takes or the course of growth.

The following cases are cited as illustrations of the use of this technic for purposes of tumor classification.

A woman aged 45, with a greatly enlarged inguinal lymph node, presented herself for examination. The remainder of the physical examination and the history as obtained from the patient at the time were not contributory. The node was removed, and histologic examination showed scattered anaplastic cells, with a preponderance of necrosis and desmoplastic reaction. There was nothing to indicate the proper classification or the primary site. Fragments of the mass were transferred to guinea pigs, and, when several of them were killed twenty days thereafter, the anterior chambers were observed to be approximately half filled with growing tumor. On section, the transplants were shown to consist of vascularized masses of cells with such characteristics of structure and organization that a histologic diagnosis of a melanotic melanoma was readily made. The patient was reexamined, and on direct question she told of the removal of a nevus from the foot several years previously.

A man aged 35 entered the hospital with a tumor of the sixth cervical vertebra, diagnosed elsewhere as osteogenic sarcoma. Biopsy specimen was taken, and on examination of a frozen section no diagnosis other than anaplastic tumor and necrosis could be made. Accordingly, fragments of the specimen were transferred to the eyes of a number of guinea pigs. The following day, a thorough search of paraffin sections disclosed several areas of greater cellularity than was noted in frozen sections, but these were nondescript and without indicative organization. A guinea pig was killed ten days after transfer, and the histologic structure of the growing transplant was typically that of a chordoma. It is of interest and in keeping with the results of transfer that the tumor metastasized and the man died a short time after operation—a relatively rare termination of growths of this type.

A woman aged 24 entered the hospital with recurrent tumor three years after incomplete removal of a growth from the eighth thoracic vertebra. The growth had been diagnosed as hemangioblastoma, and review of the sections revealed the classic histologic picture of such a tumor. At the second laminectomy, the tumor tissue showed a more disorganized structure, but the general appearance was consistent with the anaplastic development of a hemangioblastoma, and such a diagnosis was made. However, when the guinea pigs bearing grafts of the tumor were killed, twelve days after transfer, the transplants showed a well organized growth of cells whose structure and arrangement were typically those of a chondrosarcoma. As might be expected, considerable doubt was expressed by the clinicians as to the validity of the revised diagnosis; but at autopsy, approximately a year later, the typical chondrosarcomatous histology of an intrathoracic extension and of the widespread metastases attested the reliability of the guinea pig test.

A further use of heterologous transplantation as a means of determining the true nature of tumors of uncertain origin is exemplified by a case of a boy with so-called myxosarcoma of the hypopharynx. Considerable uncertainty has always existed as to the origin of this type of tumor, the question being whether it actually represents a malignant growth of myxoid tissue or whether it is merely a fibrosarcoma undergoing myxoid degeneration. An unmistakable answer was given by the guinea pig inoculation, at least for the case under discussion. In this instance the tissue used for transfer was the histologic prototype of myxosarcoma, yet the morphologic character of the growing transplant was manifestly that of a fibrosarcoma.

CONCLUSION

The object of this report is to call attention to the value of heterologous transplants as an aid to the diagnosis and classification of human tumors. The ability to survive in an alien host is not shared by normal adult tissue, benign tumors or chronic granulomas, and the mere fact of growth immediately identifies the tumor in question as cancer. The value of the procedure is enhanced from a diagnostic point of view by the increased differentiation and organization exhibited in the growing transplant. Completely disorganized tumors often undergo alterations in stromal-parenchymal relations to reveal an organized structure indicating the tissue or organ of origin. In other instances, an increased differentiation of the transplanted cells betrays their proper classification.

Laboratory of Pathology, Yale University School of Medicine.

ABSTRACT OF DISCUSSION

DR. STANLEY P. REIMANN, Philadelphia: Dr. Greene has shown that the addition of his particular test helps greatly in the classification of tumors. A morphologic statement is not a finished diagnosis; but Dr. Greene, I am sure, will agree that those who use his method must first have had some experience and training in pathologic anatomy. The name given to a tumor makes no difference to the patient, nor does he care how it behaved in himself or in the guinea pig's eyes. The patient's fate depends on whether or not every last cancer cell has been removed or destroyed. But the study of the behavior of tumors is of the utmost importance to an understanding of malignancy. I again call your attention to the "confusion of tongues" in regard to tumors. Differences in words are often taken to mean differences in things and in phenomena. Something should be done about it! I still recommend that pathologic anatomy be taught first and then as much of the behavior of tissue as is known. But one must continuously bear in mind the difference between the patient's point of view and the position that the study of cellular activities in all their phases will eventually lead to a better understanding of cancer. Perhaps the patient, in the indefinite future, will also come to a different point of view.

DR. E. V. COWDRY, St. Louis: I should like to ask about the essential feature, the failure of normal and chronic granulomatous tissues to grow, whereas malignant and embryonic tissues are capable of growth. In the transplantation of embryonic tissue, does the ability to grow fade out at the same time in the different types of cells? Does it stop suddenly, or does it gradually cease?

DR. R. R. SPENCER, Washington, D. C.: Dr. Greene's paper represents splendid pioneer work; as time goes on it will be increasingly important. However, I am skeptical about his classification and the attempt to "pigeonhole" cancer. I believe

cancer is a process that is so general that it is difficult to classify. For this reason, I understand that leukemias, which certainly belong in the class of malignant hyperplasia and the malignant process, are excluded by Dr. Greene because leukemia cells will not grow by his method. I also understand that there is at least one experimental tumor in the rat—that developed by Dr. W. F. Dunning in her laboratory in the Detroit Institute of Cancer Research, which develops and kills the animals but which does not grow in the anterior chamber of the eye of heterologous species.

Dr. Alvin G. Foord, Pasadena, Calif.: If one took 100 consecutive malignant tumors and implanted each one in an animal, how many positive takes would result?

Dr. Robert S. Stone, San Francisco: One of the advantages of a conference is that one can hear the other man's discussion. I am a radiologist. It has always annoyed me that the pathologist notes a tumor as either radiosensitive or radioresistant, thereby encouraging, or discouraging, the clinician's advocation of treatment. Dr. Greene has shown a beautiful example of the difficulty one may have in telling from one section whether a tumor may be radiosensitive or radioresistant. Moreover, I should like to point out that labeling a tumor as radiosensitive or radioresistant has nothing to do with its curability. A most radioresistant tumor, such as cancer of the lip, may be the only one that can be cured, whereas a lymphoma or such a radiosensitive tumor as was shown a few minutes ago is seldom curable. In this respect, I differ with Dr. Reimann that one can make a prognosis, because with tumors that grow like the one shown here it is seldom possible for the surgeon to remove all the growth, for it has already gone too far. It is almost impossible for the radiologist to bring about a cure because, as Dr. Greene showed, the growth in the treated region disappeared beautifully but the tumor was already somewhere else. I hope that these studies of Dr. Greene's will result in a means, by behavior technic, of telling more of a practical nature about what radiologists should do with tumors.

Dr. Harry S. N. Greene, New Haven, Conn.: Dr. Reimann asked how frequently I believe a diagnosis of cancer could be made microscopically. The answer, of course, depends on one's definition of cancer. If cancer is defined in purely morphologic terms as a growth showing alterations in the size, shape and staining qualities of cells and nuclei; loss of polarity, and an increase in the number of mitoses, then a microscopic diagnosis can always be made. If, on the other hand, one's conception of cancer derives from its biologic attributes, and such properties as autonomy and ability to metastasize are considered as essential identifying qualities, then the basis of diagnosis depends on behavior. The technic I have described is a method of assessing character through behavior, and in my experience it has proved more reliable than the microscopic method of judging character from appearance. Dr. Cowdry's question concerned the growth of embryonic tissue in the anterior chamber of the guinea pig eye and how it differs from the growth of cancer. Cancer grows progressively and can be transferred serially through unlimited generations of animals. Embryonic tissue, however, undergoes differentiation after a period of rapid proliferation; subsequent growth is slow, and serial transplantability is limited to several generations. This distinction requires comment in passing. Actually, it is the most conspicuous difference between the two tissues. Morphologically, immunologically and biochemically cancer tissue and early embryonic tissue are identical. However, both in the primary host and in the experimental animal, embryonic tissue undergoes differentiation, whereas cancer tissue does not. It would appear, therefore, that the step from embryonic tissue to cancer was a relatively short one and that it was concerned with the process of differentiation. Accordingly, one of my endeavors has been to modify or to inhibit the differentiation of embryonic tissue, with the hope of producing a cancer. Briefly, it has been observed that if a crystal of methylcholanthrene or other so-called carcinogenic hydrocarbon is added to the embryonic organ at the time of transfer, a carcinoma characteristic of the transplanted tissue develops within thirty days.

Dr. E. V. Cowdry, St. Louis: My question was: When does the failure to grow appear in embryonic tissues? Does it appear suddenly in tissues of many kinds at the same time?

Dr. Harry S. N. Greene, New Haven, Conn.: Dr. Cowdry asked at what age embryonic tissue loses the ability to survive heterologous transfer. The age differs according to species. In man heterotransplantability is lost during the fifth month of gestation. It is retained throughout the greater part of embryonic life in the mouse, ceases at about the twenty-fifth day in the rabbit and about halfway through gestation in the guinea pig. A question was asked concerning the heterotransplantability of the lymphomas. Despite numerous attempts, I have not been able to transfer leukemia, Hodgkin's disease or any of the other lymphomas from man to lower animals. The inability to grow on transplantation would seem to constitute further evidence against their classification as neoplastic diseases. A question was asked concerning the percentage of takes to be expected from the transplantation of a human cancer. The number of takes is directly proportional to the amount of stroma or desmoplastic tissue present in the tumor. Stroma and desmoplastic tissue are adult tissues and they excite a foreign body reaction in the alien host, which may completely destroy the transplant. Successful transfer depends on the selection of tumor fragments containing a preponderance of parenchyma, and such selection is easily made from the appearance of frozen sections.

Special Article

CANCER OF THE HEAD AND NECK

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(Continued from p. 1314 in The Journal, Aug. 7)

III. CANCER OF THE LARYNX

Anatomically the larynx extends from the tip of the epiglottis to the inferior margin of the cricoid cartilage, and the term cancer of the larynx, therefore, includes all malignant growths arising in the epiglottis, the aryepiglottic folds, the arytenoids, the ventricular bands, the ventricles, the vocal cords, the subglottic area and the postcricoid region. Laryngeal cancer may be divided anatomically into two general groups: (1) Growths arising on the vocal cords and ventricles and in the subglottic region are classified as cancer of the intrinsic larynx, and (2) growths arising on the upper surface of the ventricular bands, the epiglottis or its appendages or in the postcricoid region constitute cancer of the extrinsic larynx.

ETIOLOGY

Laryngeal cancer comprises about 2 per cent of all human malignant tumors. Like cancer of the mouth this disease occurs most often in middle and old age, and predominantly in males (97 per cent). The incidence of intrinsic and extrinsic laryngeal cancer is about equal.

Causative Factors.—The preexistence of chronic local irritation which may so often be shown to play a part in the causation of malignant growths of the oral cavity is not readily demonstrated in cancer of the larynx. Although excessive smoking with inhaling, voice strain and syphilis are undoubtedly etiologic factors in an occasional case, these forms of irritation cannot be shown to have a significant etiologic role in most cases of laryngeal cancer. The disease usually appears to arise spontaneously. Leukoplakia of the larynx (pachyderma laryngis) sometimes undergoes malignant transformation.

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PATHOLOGY

Epidermoid or squamous carcinoma is the predominant histologic form of cancer which affects the larynx. This is to be expected in a mucosa which consists entirely of stratified squamous epithelium covering the vocal cords and a pseudostratified transitional type lining the larynx above and below the cords. In the intrinsic part of the larynx, over two thirds of the growths are well differentiated epidermoid carcinoma (grades 1 and 2) and in the extrinsic part of the larynx about 50 per cent fall into this class. The degree of anaplasia of laryngeal cancer generally increases the further its site of origin is removed from the region of the cords.

SYMPTOMS, MORBID ANATOMY AND CLINICAL COURSE

The symptoms of laryngeal growths vary greatly depending on the exact site of origin.

Cancer of the Intrinsic Larynx.—Hoarseness is invariably present in the early stages of cancer of the cords, and in practically all cases careful questioning of the patient will reveal that this was actually the first symptom. The progress of the disease is usually slow, and hoarseness may persist as the only symptom for as long as one to three years in untreated patients before the airway is diminished sufficiently to produce dyspnea. As the disease infiltrates deeply into the vocal cords, complete aphonia results. If, on the other hand, the lesion tends to fungate rather than to infiltrate, husky phonation may be accompanied by gradually increasing dyspnea as the aperture of the glottis is narrowed. Eventually, the disease may perforate the laryngeal cartilage or the cricothyroid membrane to invade the soft tissues of the neck. Metastasis to the cervical lymph nodes rarely occurs early in the course of this anatomic variety of laryngeal cancer.

As viewed through a throat mirror or laryngoscope, early cancer of the intrinsic larynx usually appears as a granular, papillary outgrowth or as a flat, slightly excavated ulcer with raised borders, most frequently situated in the free edge or upper surface of the anterior two thirds of the vocal cords (fig. 9). The posterior third of the cords or the posterior commissure is seldom the primary site of origin. In later stages the growth infiltrates more deeply with eventual fixation of the affected cord, and as the disease progresses the lesion spreads upward into the ventricle and the ventricular band and across the anterior commissure to involve the opposite cord. Characteristically, cancer of the intrinsic larynx remains a fairly well localized disease until death.

Cancer of the Extrinsic Larynx.—The symptoms of extrinsic laryngeal cancer are varied and often misleading. Hoarseness seldom occurs early in the disease. Frequently the first symptom consists of slight pain or vague discomfort in the throat on swallowing. Persistence of such complaints and progression of their severity are probably the most characteristic subjective features of extrinsic laryngeal cancer. Hoarseness almost always occurs as the second symptom in the moderately advanced stages of the disease, and is due to downward extension of the growth toward the vocal cords or to edema at the level of the cricoid cartilage. The appearance of an enlarged cervical lymph node (discovered by the patient as a "lump in the neck") usually in the region of the carotid bifurcation is third in frequency as the earliest symptom of cancer of the extrinsic larynx. It is significant that such metastatic spread will occur as the initial symptom in about one fifth of the cases. In intrinsic laryngeal cancer metastasis to the cervical lymph nodes almost never occurs as the first symptom.

Viewed through the laryngeal mirror, extrinsic cancer of the larynx usually presents as a fairly bulky lesion (1 to 3 cm. in diameter) when first seen by the physician. The growth characteristically appears as a fungating, papillary tumor of the epiglottis, the aryepiglottic folds, the arytenoids, or the postcricoid region (fig. 10). Occasionally, the lesion presents as a slightly excavated ulcer which has infiltrated deeply. There is almost always accompanying edema that may be sufficient partly to conceal the ulcerated character of the lesion. On the outer or posterior surface of the arytenoids, or in the postcricoid region, slight swelling may obscure the ulcer entirely so that the actual growth can be visualized only by direct laryngoscopy. As cancer of the extrinsic larynx progresses, it tends to invade adjacent structures, and as the edema increases and the growth extends, both dyspnea and dysphagia occur.

Metastasis to the cervical lymph nodes in extrinsic laryngeal cancer frequently takes place fairly early, and almost always in the later stages of the disease. These metastases may become fairly bulky and may compress the cervical nerves to cause intractable pain. Metastasis below the level of the clavicle often occurs if the patient survives the local effects of the disease.

DIAGNOSIS

There is probably no anatomic form of cancer in which avoidable delay in diagnosis may be more readily demonstrated than in malignant tumors of the larynx. There are only three important symptoms in cancer of the larynx, namely, hoarseness in cancer of the vocal cords (intrinsic), and either persistent pain and discomfort on swallowing or the appearance of cervical metastasis in cancer of the extrinsic larynx.

An analysis of large numbers of cases of cancer of the cords reveals that the majority of patients with persistent hoarseness will consult a physician within six weeks. If cancer is suspected and proper investigative steps taken, the true diagnosis will of course be made in all instances. Analysis will also show that when the physician first consulted for hoarseness does not examine the vocal cords but only prescribes medication (gargles, etc.) there is an average delay of over ten months before the true diagnosis is made. Since the patient is assured that his hoarseness is not of serious significance, he tends to procrastinate for weeks or months before further insisting on relief. It is important to emphasize both to the members of the medical profession and to the laity that persistent hoarseness (over two weeks) is almost always serious in character and that it is imperative to find the cause.

In growths of the extrinsic larynx, the early symptoms—minimal dysphagia or the appearance of cervical metastasis—are less impressive than in cancer of the cords, but nevertheless the patient will usually consult his physician within two weeks of the onset. When the patient complains of such symptoms, the physician should realize that the disorder may be serious. An examination of the throat should be made by one experienced in this procedure and in the diagnosis of ailments of the throat. The appearance of an enlarged cervical node, usually termed by the patient "lump or knot in the neck," should always raise the question of metastatic cancer and calls for a thorough search of

the mouth and all parts of the pharynx and larynx for the primary source of the tumor.

Differential Diagnosis.—There are numerous lesions occurring in the larynx which may simulate cancer clinically. These are: benign mucous polyps, pachyderma, papilloma, tuberculosis and syphilis. Elaborate descriptions have been published in the past to aid in the clinical differentiation between such diseases and laryngeal cancer. Even to the thoroughly experienced, a differential diagnosis based on clinical characteristics alone is often inaccurate. Only by microscopic examination of a biopsy specimen can a diagnosis be definitely made.

A biopsy specimen can be removed from most parts of the extrinsic portion of the larynx by a curved biopsy forceps guided by a laryngeal mirror. Biopsy of lesions in the intrinsic part of the larynx and the postcricoid region usually requires direct laryngoscopy.

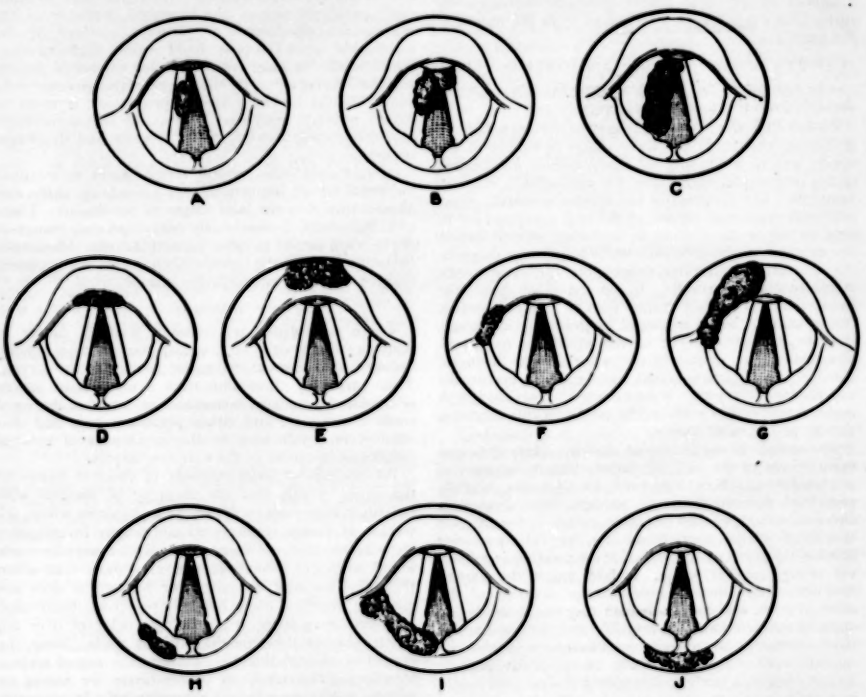

Fig. 10.—Cancer of the larynx as seen through the laryngeal mirror. The lesions as shown are reasonably early. In the more advanced stages, the appearance is variable and often somewhat confusing as to the exact point of origin. Top row: Cancer of the Intrinsic Larynx. (*a*) Lesion limited to about one third of one vocal cord. (*b*) Spread of the growth into the anterior commissure to involve the opposite cord. (*c*) Further progress of cordal cancer. Middle and bottom rows: Cancer of the Extrinsic Larynx, showing the most common variations in point of origin. (*d*) Base of epiglottis. (*e*) Tip of epiglottis. (*f*) Lateral aspect of epiglottis. (*g*) Epiglottis and aryepiglottic fold. (*h*) Lateral aspect of arytenoid. (*i*) Aryepiglottic fold and arytenoid. (*j*) Postcricoid region.

TREATMENT

During the past fifteen years there has been a great deal of partisan and often prejudiced discussion as regards the most effective method of treatment for cancer of the larynx. Such controversy is to be expected, for the power of speech is considered to be one of the most precious of human attributes and one which distinguishes man from the lower animal. When cancer affects the larynx and a method of treatment is proposed to the patient which would deprive him of this function, the natural reaction of both the patient and his physician is one of reluctance and resistance, and any alternative method which promises to cure cancer of the larynx with preservation of this organ and of the function of speech deserves serious consideration.

Fractionated radiation therapy for cancer of the larynx brought about some promising initial results, and formerly it was hoped and firmly believed by many that with further experience and refinements in technic the method would completely supplant surgery in the treatment of this disease. Such early hopes have not been sustained by the experience of the past twenty years. Radiation therapy will cure a small percentage of cases of laryngeal cancer, both extrinsic and intrinsic. This method of treatment, however, is uncertain and fraught with serious complications that may arise at any time, even years following completion of therapy,

because of the degenerative effects of radiation on normal tissues in this area, even though the cancer itself is cured.

At the present time, it can be stated without question that surgical treatment (partial or total laryngectomy) will cure a higher percentage of cases of both extrinsic and intrinsic laryngeal cancer than will radiation therapy provided that the growth is in an operable stage. Surgery is, therefore, the method of choice from the standpoint of chance of cure and of saving life. Unfortunately, in cancer of the extrinsic part of the larynx (epiglottis, aryepiglottic folds, arytenoids, postcricoid region and ventricular bands) only about 1 in 3 cases has so far been considered operable, so that for the remaining two thirds of the cases radiation therapy has been the only alternative. The latter method will result in a small but definite number of cures in these otherwise inoperable and incurable patients.

Briefly stated, the indications for treatment in cancer of the larynx from the standpoint of obtaining the highest percentage of cures in all comers is as follows: early cancer of the intrinsic larynx—partial laryngectomy through laryngofissure; moderately advanced cancer of the intrinsic larynx—total laryngectomy; advanced cancer of the intrinsic larynx—total laryngectomy; early and moderately advanced cancer of the extrinsic larynx—total laryngectomy; advanced and inoperable cancer of the extrinsic larynx—radiation therapy.

After consideration of the aforementioned groups there still remains a small number of cases which do not fit into any of these classifications of treatment, such as locally recurrent cancer after total laryngectomy and cervical metastasis in both operable and inoperable cases. Many of these patients are still suitable subjects for further surgical treatment, but in the majority of such cases roentgen and radium therapy combined with surgical treatment is the best solution of the problem.

Cervical metastasis is not a frequent problem in cancer of the intrinsic larynx, for such spread usually occurs at an interval of several months or even years following surgical removal of the primary growth. In these cases, neck dissection is the method of choice of treatment (unilateral or bilateral). When metastasis occurs in cases of inoperable cancer of the extrinsic larynx, a program of radiation therapy may be employed and the treatment should be directed toward the metastatic nodes as well as the primary lesion. In other situations, operable metastases are present on admission in cases of operable primary lesions in the extrinsic or intrinsic part of the larynx. In these, it is often possible to remove the larynx and make a neck dissection in either one or two stages.

PROGNOSIS AND END RESULTS

The five year cure rate in cancer of the larynx as obtained in one clinic is given in table 2. This group includes all patients applying to a single institution—early, far advanced, primary or recurrent cancer following surgical treatment or radiation therapy elsewhere.

The prognosis in laryngeal cancer is influenced by a number of factors, the most significant of which are the size of the growth and the presence or absence of metastasis to cervical lymph nodes. The importance of these factors can be plainly demonstrated by the fact that when the tumor on the vocal cord measures 1 cm. or less in diameter a five year cure of 95 per cent may be obtained by partial laryngectomy through laryngofissure. The rate of cure in larger lesions of the intrinsic part of the larynx and in any lesion of the extrinsic part of the larynx is definitely lower.

IV. CANCER OF THE NECK

In a discussion of malignant tumors of the neck it is essential first to emphasize that the most frequent variety of cancer in this area is metastasis to the cervical lymph nodes from primary sites outside the neck and that only a small proportion of cancer in this region arises primarily in the structures of the neck. This difference is not always appreciated, so that erroneous diagnoses are made in ascribing a local origin to a cervical tumor and disregarding the probability that a primary lesion of cancer may be present in the mouth, pharynx, skin of the face or scalp or even in some viscus below the clavicle.

Although most malignant neoplastic disease in the neck is metastatic, there are several varieties of tumors which arise primarily in the cervical structures, namely, malignant lymphoma, thyroid cancer, tumors of parotid or submaxillary salivary glands and sarcoma of the soft parts (muscle, fascia, nerve). Among the less frequent primary growths arising in the neck are branchioma, tumor of the carotid body and cervical chordoma. These morphologic varieties will be discussed under separate headings.

METASTATIC CERVICAL CANCER

Asymmetric enlargement of the cervical lymph nodes in the adult is almost always malignant and usually due to metastasis from a primary lesion in the mouth or pharynx, and occasionally from a viscus below the level of the clavicle. Cervical metastatic cancer occurs more frequently than any other form of malignant neoplastic disease in this locality, so that no other diagnosis should be made except by exclusion of such a probability. When asymmetric enlargement of cervical lymph nodes is encountered in children, it may be due to metastasis, although this possibility is less likely than in adults.

The details of the lymphatics of the neck have been thoroughly investigated by anatomists. In certain sites nodes occur so consistently that they have been given definitive anatomic designations, such as the internal jugular chain, the subdigastric node, the spinal accessory chain, the prevascular and retrovascular submaxillary nodes and the preglandular node (fig. 11). Enlargements of cervical nodes in these specific areas, especially if asymmetric, always suggest the probability of metastatic cancer. It must be realized, however, that the diagnosis and treatment of such metastasis alone is entirely inadequate unless the primary lesion is also discovered and treated at the same time.

Diagnosis of Cervical Metastatic Cancer.—For practical purposes a lymph node cannot be considered abnormal unless it is enlarged, but a distinction must be made between enlargement and palpability. Lymph nodes are palpable in the majority of normal subjects. Asymmetry is the only truly significant clinical characteristic of enlargement of a lymph node.

One of the greatest errors in the diagnosis of cervical tumors or enlargement of lymph nodes is the immediate excision of a tissue specimen for biopsy, for even though the presence of malignant neoplastic disease in the neck is thereby proved, the diagnosis is incomplete, nevertheless, until the primary lesion is found. The local excision

of a node in the neck as the primary procedure for cancerous lesions greatly decreases the prognosis for cure. If the physician eventually will have to refer a patient with a biopsy diagnosis of metastatic cervical cancer elsewhere for treatment, then logically he should make this disposition before rather than after the biopsy. If, on the other hand, he is willing to assume the entire responsibility for the management of the case, then he is obliged to make a thorough search for a primary lesion in the mouth or pharynx first, using incisional biopsy of the lymph node only as the last resort.

Aspiration Biopsy.—A useful diagnostic measure in tumors of the neck is aspiration biopsy. With this procedure the clinical picture is in no way altered and a positive microscopic diagnosis may be obtained in most cases. A histologic diagnosis established by aspiration biopsy will indicate tentatively whether the growth is primary or metastatic, will often yield clues as to the possible location of the primary lesion and occasionally disclose the presence of benign cysts and chronic inflammatory disease (tuberculosis, Boeck's sarcoid, etc.)

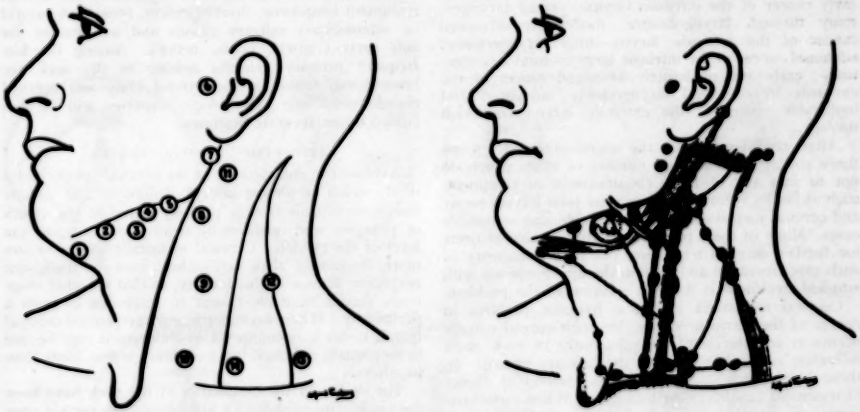

Fig. 11.—Deep lymphatics of the neck. Although the anatomy of the cervical lymphatics is somewhat variable there are, nevertheless, certain constant features; that is, lymph nodes are always present in certain areas and therefore these nodes or node groups can be assigned specific names. Index of main nodes and groups of nodes: (1) submental group; (2) preglandular, (3) intraglandular, (4) prevascular and (5) retrovascular; submaxillary group; (6) preauricular and (7) infra-auricular; parotid group; (8) subdigastric, (9) midcervical and (10) lower cervical; internal jugular chain; (11) upper, (12) middle and (13) lower spinal accessory chain; (14) transverse cervical chain.

Treatment of Cervical Metastatic Cancer.—The treatment is inescapably a part of the problem of management of the primary lesion and for that reason will not be discussed here.

MALIGNANT LYMPHOMA (LYMPHOSARCOMA AND HODGKIN'S DISEASE)

Malignant lymphoma of the cervical nodes may be divided into two general varieties—lymphosarcoma and Hodgkin's disease. The former occurs with considerably greater frequency in the head and neck than does Hodgkin's disease.

Lymphosarcoma is encountered in all age groups but is most commonly seen in the fifth and sixth decades of life. Males are affected as often as females. The most usual site for a primary lesion of lymphosarcoma in the upper respiratory and alimentary tracts is in the tonsil (50 per cent of cases).

Both lymphosarcoma and Hodgkin's disease may originate in the cervical lymphatics, or involvement of these nodes may be part of a generalized process. Lymphosarcoma may arise in any of the lymphoid structures of Waldeyer's ring (nasopharynx, base of tongue, tonsil) and is occasionally metastatic to the cervical nodes, taking the same route as epidermoid carcinoma. It is impossible to distinguish malignant lymphoma of the neck from metastatic cervical carcinoma by clinical examination alone, although lymphomatous tumors in general tend to be more rapid in growth, softer and bulkier than tumor metastasis of epithelial origin. The number of nodes involved by lymphosarcoma tend to be less than in Hodgkin's disease, and in the latter there is usually more induration. None of these clinical characteristics is constant enough to be of significant diagnostic value.

Diagnosis of Malignant Lymphoma.—The diagnosis of malignant lymphoma of the neck can be made only by the exclusion of other forms of cervical cancer and is based on a histologic study of tissue removed from the tumor. In some cases it may be possible to make a diagnosis on aspiration biopsy alone, but usually the pathologist, although suspecting malignant lymphoma, will request an incisional biopsy for this particular group of neoplastic diseases.

Treatment of Malignant Lymphoma.—Lymphosarcoma is one of the more radiosensitive of malignant tumors, and in most cases the initial response to radiation therapy will be good. Further, the uncertainty of the course of the disease makes surgical treatment undesirable, so that with the diagnosis of lymphosarcoma radiation therapy is the accepted treatment.

In the past it has been recommended by some that the dosage should be small or at least not more than moderate, both because the disease is radiosensitive and

because of the widespread belief that lympsosarcoma is a constitutional disease from the beginning (heterotopic origin). Long range clinical observations and investigation in the treatment of lymphosarcoma of the head and neck do not support this concept. The cure rate of lymphosarcoma of the head and neck, whether primary in the cervical lymph nodes or metastatic from the tonsil or pharynx, gives even a better prognosis when treated with radiation therapy than epidermoid carcinoma (52 per cent five year cure rate), but the dosage must be maximal rather than minimal (the same as for epidermoid cancer).

When Hodgkin's disease involves the cervical nodes, there is usually clinical or roentgenographic evidence of disease elsewhere in the body, particularly in the thorax or abdomen. Since the lesions of this variety of malignant lymphoma are radiosensitive and frequently widespread on admission, these patients are best treated with radiation therapy, after the diagnosis has been confirmed histologically by aspiration or incisional biopsy. In an occasional case in which the disease in the neck is not too extensive or bulky (preferably unilateral) and careful physical and roentgenographic examination reveals no evidence of involvement elsewhere, treatment by neck dissection may be employed.

CANCER OF THE THYROID GLAND

Malignant tumors of the thyroid gland, though relatively uncommon, are among the most interesting in the field of oncology because of the wide variation and unpredictability of their behavior and their clinical resemblance to several more common benign forms of thyroid tumors and enlargements.

Cancer of the thyroid comprises about 0.4 per cent of all human cancer. Females are affected more often (65 per cent) than males. The median age is 52 years. Although the growth occurs most often in the 40 to 60 year age groups, thyroid cancer is more frequently encountered in children than most other varieties of malignant tumors in the head and neck.

Causative Factors in Thyroid Cancer.—Nothing is known as to the direct cause of thyroid cancer. Carcinoma is occasionally seen to originate in nodular (adenomatous) goiter and in fetal adenoma. Although a specific causal relationship between these lesions and thyroid cancer has not been conclusively demonstrated histologically, nevertheless, the occurrence of cancer in about 5 per cent of such thyroid lesions indicates that they play a significant role in its etiology.

Pathology of Thyroid Cancer.—In most cases the growth consists of low grade papillary adenocarcinoma, usually metastasizing to the cervical lymph nodes relatively late in the course of the disease. Other morphologic varieties of cancer which occur though rarely in the thyroid gland are spindle and giant cell, Hürthle cell and anaplastic carcinoma.

Symptoms and Clinical Course of Thyroid Cancer.—The symptoms of cancer of the thyroid gland are seldom pronounced in the beginning. The patient usually finds a "lump in the neck" and seeks medical advice after varying intervals with no other complaints. In a smaller proportion of cases the patient discovers "lumps in one or both sides of the neck," which are usually metastases from the primary growth in the thyroid, and seeks medical advice for this reason. In the latter instance, the alert physician may note a mass in the thyroid gland of which the patient was not aware, or physical examination may fail to disclose any thyroid tumor. Nevertheless, such a primary lesion will invariably be established at operation.[1]

The history of the cervical tumor, whether in the lymph nodes or in the thyroid itself, is fairly long (several months to three to five years). The clinical course of this disease is so slow that sometimes metastatic masses in the neck will have reached the size of 8 to 10 cm. in diameter before a physician is consulted, by which time such metastases may overlie one lobe of the thyroid, completely obscuring the presence of a primary thyroid neoplasm.

In other cases, the tumor apparently remains confined to the thyroid itself, and over a period of years undergoes steady growth to reach a size of 10 cm. or more in diameter; the mass, which is confined by the overlying strap muscles, produces gradual pressure, displacing the esophagus and trachea so that the first symptoms are progressive dyspnea and dysphagia. At this stage of the disease, the growth may or may not have actually invaded the trachea, esophagus or recurrent laryngeal nerve, or cervical lymph node or systemic metastases may have occurred. Occasionally, the tumor, confined beneath the strap muscles, will encounter less resistance to downward extension into the superior mediastinum. A malignant neoplasm of the thyroid which arises on the posterior aspect of one lobe may press on or invade the recurrent laryngeal nerve fairly early in the course of the disease, with hoarseness as the first serious symptom.

If thyroid cancer is uncontrolled, the most frequent cause of death is from the local effects of the disease, namely pressure on and invasion of the trachea and esophagus. As the disease in the neck or mediastinum advances, death will occur from respiratory obstruction, which is not readily relieved by tracheostomy since the trachea is markedly distorted or often directly invaded by the growth below the level of the manubrium. If the local tumor has been completely or partly removed and the serious effects of tracheal obstruction prevented or relieved, metastasis to bone, lungs or other viscera may take place at any time up to twenty years. In any case, the progress of the disease tends to be slow.

Diagnosis of Thyroid Cancer.—A tumor in the lower anterior portion of the neck which moves upward with the larynx and trachea on swallowing is almost always of thyroid origin. There are no distinguishing clinical characteristics, however, between early cancer of the thyroid and benign adenoma containing cancer.

A diagnosis of a malignant tumor in this gland is often made on routine histologic examination of the surgical specimen following the frequently performed procedure of partial thyroidectomy for nodular goiter (benign adenoma). When a mass in the thyroid resembling adenoma is found to be unusually hard and irregular in contour, rather than smooth or nodular, a tentative diagnosis of cancer should be made and steps taken to establish a histologic diagnosis by aspiration biopsy before deciding on the method of treatment, or at least a frozen section should be obtained at the time of operation.

1. It has not been definitely settled whether aberrant thyroid tissue in the neck can give rise to aberrant thyroid cancer or whether such masses outside the thyroid are actually metastatic from small primary growths in the thyroid. There is evidence to indicate that such an entity as aberrant thyroid cancer does exist, but the diagnosis is too frequently and loosely made. In most cases first considered as cancer of aberrant thyroid origin, a growth of similar histologic character can be found in the corresponding lobe of the thyroid if a careful search is made at operation, and in some of these the primary lesion in the thyroid can only be demonstrated microscopically.

The possibility of a malignant growth in the thyroid should be kept in mind in all cases of enlargement of cervical lymph nodes. In the search for a primary lesion, both before and after a histologic diagnosis of metastatic cancer in the cervical nodes has been established, a thorough search of the oral cavity and pharynx should be followed by palpation of the thyroid. Even the smallest nodular enlargement in any portion of the gland should be considered significant. An aspiration biopsy of a mass in the neck may suggest to the pathologist the most likely site of the primary lesion (thyroid, lung, pharynx, etc.).

In all instances of unilateral paralysis of the larynx (recurrent nerve) particular attention should be paid to the possibility of a thyroid neoplasm, palpating deeply in the region between the trachea and the spine. In some of these cases evidence of a substernal growth may be disclosed on roentgenographic examination of the chest which must be differentiated from other causes of recurrent nerve paralysis such as mediastinal tumors of nonthyroid origin or aneurysm of the aorta.

Treatment of Thyroid Cancer.—One of the basic principles underlying the treatment of thyroid cancer is the recognition that the growth may arise in or clinically resemble benign adenoma. That is the reason why all thyroid tumors should be excised, preferably by complete removal of the affected lobe or lobes. Furthermore, all excised thyroid adenomas should be subjected to histologic examination for the presence of unsuspected malignant neoplastic disease. If a small cancer is discovered in an excised adenoma after routine histologic examination of the surgical specimen and there is no clinical evidence of cervical metastasis, nothing further should be done except systematic follow-up examination of the patient.

When a definite diagnosis of thyroid cancer can be established preoperatively (aspiration biopsy), the treatment of choice is a wide resection of that portion of the gland containing the tumor (hemithyroidectomy) combined with a homolateral block dissection of the neck (removal of the internal jugular vein, sternomastoid and strap muscles, submaxillary salivary gland and accompanying lymph nodes). The removal of the internal jugular vein is a significant part of the surgical treatment of thyroid cancer, since metastasis so commonly invades veins.

As already mentioned, the average malignant tumor of the thyroid is not radiosensitive and if the growth is operable, radiation therapy should never be used as the primary method of treatment. In most cases neither preoperative nor postoperative radiation therapy is indicated. Cancer-lethal doses of radiation given to the thyroid will frequently produce edema of the larynx and increase the hazard of obstruction to the airway without appreciably affecting the local disease.

Due to the relatively benign course of early cancer of the thyroid many patients will be seen for the first time in the later stages of the disease. In these cases, there may be widespread visceral or skeletal metastasis. Nevertheless, the primary tumor in the thyroid should be excised as widely as possible for palliative reasons. If this can be done and the complications due to pressure on the trachea and esophagus relieved, the patient may live for a period of several years before succumbing to the effects of generalized metastasis.

In clearly inoperable cases a judicious amount of radiation therapy may be used if there is histologic or other evidence (absorption of radioactive iodine) of radiosensitivity. In all forms of painful osseous metastasis, radiation therapy may offer some measure of relief. Within recent years, it has been hoped that radioactive iodine might prove of value in the treatment and possibly the cure of thyroid cancer. Unfortunately, only about 15 per cent of malignant thyroid tumors will pick up this isotope, and only in this group can any favorable effect be expected. In an occasional case, the administration of radioactive iodine has brought about considerable amelioration of symptoms and regression of local recurrences, and it is hoped that in these some cures may eventually be obtained.

Prognosis and End Results of Thyroid Cancer.—As previously mentioned, the immediate prognosis in thyroid cancer is almost always good. In all comers, the cure rate is about 25 per cent, but if the disease can be discovered and adequately treated in the early stages it carries one of the best prognoses of any form of cancer.

SARCOMA OF THE SOFT PARTS OF THE NECK

Malignant tumors of the soft parts of the neck exhibit the same clinical and anatomic characteristics as soft part neoplasms in other parts of the body. Sarcoma may arise in almost any tissue—muscle (myosarcoma), nerve (neurogenic sarcoma), connective tissue (fibrosarcoma), fat (liposarcoma), blood vessels (angiosarcoma), etc. When the histogenesis cannot be established such growths are usually referred to by the over-all term "spindle-cell sarcoma."

Malignant tumors of the soft somatic tissues occur more often on the extremities and are encountered less frequently in the neck. This morphologic variety of cancer when it occurs in the neck is found in larger proportions among the younger age groups and in children.

Little can be said about their clinical characteristics. They may originate in any part of the neck (anterior, lateral, posterior) and grow outward to form bulky masses or inward to compress the trachea or esophagus. They are more infiltrating in nature than malignant tumors of epithelial origin and in most cases are radioresistant. Radical surgical removal offers the best chance of cure, although, as with sarcoma in general, pulmonary metastasis is a frequent occurrence.

BRANCHIOGENIC CANCER

Malignant branchioma (branchiogenic cancer) refers to those malignant tumors which are believed to arise in the vestigial remnants of the embryonal branchial apparatus. Such a diagnosis is too often made in the case of neoplasms appearing in the lateral aspects of the neck and presumably unassociated with a primary growth elsewhere.

Experience in cancer clinics has shown that the overwhelming majority of malignant tumors which arise in the neck are metastastic from a silent primary neoplasm somewhere in the mouth or pharynx, or even from a site below the level of the clavicle. Less often, such primary cervical neoplasms originate from one of the major salivary glands or other tissues in the neck (muscle, connective tissue, nerve, etc.). The diagnosis of malignant branchioma can rarely be justifiably made, since the primary lesion of cancer in the mouth or pharynx may remain silent or of such small size as to be undemonstrable for a period of several

years. This diagnosis is not reasonable, therefore, except after an observation period of five years following treatment of the cervical tumor. Up to that time the diagnosis of malignant branchioma must remain tentative only.

Morbid Anatomy and Clinical Characteristics of Malignant Branchioma.—The vestigial remnants of the branchial apparatus are situated on a line extending just anterior to the tragus of the ear, downward along the medial border of the sternomastoid muscle to the clavicle. Anatomically, therefore, branchial cancer cannot occur in any other region of the neck. Histologically, the tumor should logically be epithelial cancer (epidermoid carcinoma, adenocarcinoma), but since the embryonal branchial apparatus also contains other tissue components (muscle, connective tissue, nerve, etc.), it is theoretically possible for branchial cancer to occur in the form of myosarcoma, fibrosarcoma, etc. In the cases finally diagnosed as malignant branchioma no clinical features have been found which differ from those of metastatic cancer or of primary soft part tumors occurring along this line.

In general, it might be said that the diagnosis of malignant branchioma is too often and too loosely made. There may even be some doubt as to whether there is justification for such a morphologic entity, since no definite evidence has ever been produced to show that such a specific tumor actually exists. Adequate proof could only be the demonstration of cancer arising in the walls of a branchial cyst. This, so far as can be learned, has never been demonstrated.

CANCER OF THE CAROTID BODY

There are several tiny seedlike structures belonging to the chromaffin system which are situated in the region of the bifurcation of the carotid artery and designated as the carotid bodies. Tumors arising in these structures are among the rarest in the realm of neoplastic disease. In one cancer clinic where about 2,000 patients with neoplasms in the head and neck are seen yearly only 15 cases were encountered during the past ten years.

These tumors usually arise after puberty, pursue a chronic, relatively benign course and do not produce remote metastasis. Although a tumor of the carotid body usually grows slowly, remaining about 3 cm. in diameter over a period of ten to fifteen years, it may on occasion grow more rapidly and reach a size of 8 to 10 cm. or even larger. This neoplasm produces little discomfort except in rare instances in which pain is a prominent factor.

A tumor of the carotid body is located either on or behind the bifurcation of the common carotid artery, which is often compressed or invaded by the growth. It may grow upward toward the skull, inward toward the tonsillar region and pharynx or outward, producing a bulge in the neck.

A diagnosis of this specific neoplasm can be made only on histologic examination of a biopsy specimen. It may be suspected, however, when a growth occurs just below the angle of the mandible and over which there can be felt a prominent arterial pulsation, indicating that the tumor lies at least partly beneath the great vessels at this point. Aspiration biopsy will in most instances establish a definite diagnosis.

In most cases of carotid body tumor the underlying principle of treatment should be that of *noli me tangere*, for so far as is known the clinical course of the growth is almost always benign (nonmetastasizing). In general, surgical removal should be considered hazardous, for it is not possible to determine beforehand whether the neoplasm is so closely attached to the carotid crotch that it can be removed without sacrificing the integrity of the vessel wall. When such an injury occurs, it is usually impossible to repair the artery and the common or internal carotids must be ligated. It is well known that ligation at these points is attended by an operative mortality rate of about 50 per cent. If a diagnosis of tumor of a carotid body, therefore, can be established by aspiration biopsy and if the growth is not causing any symptoms, no treatment whatever should be administered. If the tumor is producing symptoms (pain) and removal is attempted, it is more prudent to leave a portion of it attached to the great vessels than to subject the patient to any undue risk. No regression of this neoplasm can be obtained with radiation therapy.

CHORDOMA

Chordoma is a rare tumor. In the head and neck it may present at the base of the skull, in the nasopharynx, retropharyngeal and parotid areas or in the lateral and posterior aspects of the neck. There is usually a history of fairly long duration when the patient is first seen, and if the growth presents in the neck a diagnosis of parotid tumor may be erroneously made.

Although the clinical course of chordoma is usually slow, the neoplasm may become widely invasive and by pressure erode the bones of the spine or base of the skull. If a preoperative diagnosis of chordoma can be established histologically (aspiration biopsy), treatment should be planned on the basis of relief of current symptoms only. Due to its origin from embryonal notochord tissue, it is impossible to effect a complete removal surgically. Nevertheless, if the projecting portions of the tumor which are causing symptoms (especially pressure on nerves) are removed, healing will take place and the patient can be afforded considerable relief. Chordoma is generally a radioresistant growth.

V. CANCER OF THE MAJOR SALIVARY GLANDS

The major salivary glands consist of the paired parotid, submaxillary and sublingual glands. Tumors occur most frequently in the parotid (about 85 per cent), less often in the submaxillary (about 15 per cent) and rarely in the sublingual gland.

When a series of tumors of the salivary glands are reviewed from the pathologic standpoint their appearance will be found to vary from a relatively acellular structure of cartilage and mucin through the more cellular types, up to a picture of highly malignant carcinoma. The transition from one extreme to the other is a gradual one, so that in the middle range there will be found a considerable number of cases in which the opinions of individual pathologists will vary as to whether given tumors should be classified as malignant or benign. Although the same can be said of many forms of cancer, this morphologic problem is of particular significance in tumors of the major salivary glands.

All benign mixed tumors of the salivary glands have a tendency toward malignant degeneration. It has been repeatedly demonstrated that in mixed tumors of the

parotid which have recurred after repeated surgical removal over a period of fifteen to twenty years and in which the original surgical specimen showed only a benign histologic pattern, a high incidence of malignant transformation finally occurred, resulting in the patient's death. Occasionally an initial surgical specimen of what appeared clinically to be a benign mixed tumor is found to show malignant changes.

In the majority of cancers of the salivary glands the malignant character of the growth is clinically apparent when the patient is first seen and it is plain that the tumor was cancer from the beginning, rather than originating in a benign tumor. In the parotid gland about 25 per cent of all tumors are malignant, and in the submaxillary gland the proportions are somewhat reversed (about 25 per cent benign). Neoplasms, either benign or malignant, rarely occur in the sublingual salivary gland.

MORBID ANATOMY AND CLINICAL COURSE

In tumors of th major salivary glands the symptom first noted by the patient is almost invariably a "lump" in the parotid or submaxillary region. In the average case, the patient has been aware of this abnormality for many months or even years before medical advice is sought. The clinical course is characteristically slow. When first seen by the examining physician, the growth may have advanced in size from a few millimeters to 8 or 10 cm. and is usually movable. The smaller tumors are smooth in contour, but in those over 5 cm. in diameter nodularity is a common feature. The growth is invariably unilateral and single; multiple tumors occur only as recurrences after incomplete surgical excision (seeding).

Most tumors of the salivary glands, even when malignant, tend to be noninvasive, so that as enlargement occurs they displace rather than infiltrate the adjacent structures. As a result, the branches of the facial nerve will usually be pushed aside as the growth advances in the parotid gland, and facial paralysis is rarely present in the early or uncomplicated cases. When the seventh cranial nerve is compressed or actually infiltrated by a malignant tumor of the parotid with resulting facial paralysis, the growth in most cases is relatively far advanced or recurrent. As the tumor grows it tends to migrate toward the outer surface of the parotid gland (the direction of least resistance). When the growth arises in the deep (retromandibular) portion of the gland, lateral extension is at least partially blocked by the ascending ramus of the mandible, and therefore it tends to advance mesially toward the pharynx and may even present as a bulge in the tonsillar area.

In general, cancer of the parotid tends to remain fairly well localized, eventually producing death mainly by local extension of the disease to the structures of the middle ear and mastoid, pharynx, neck and base of the skull with sepsis, malnutrition, pain and hemorrhage. Except in cases in which the primary growth in the parotid is controlled, metastases do not often play a large part in the cause of death. If the patient survives the local effects of the disease long enough after the disease is controlled, local metastasis occasionally occurs first to the cervical lymph nodes and then systemically.

Tumors of the submaxillary salivary gland resemble parotid growths in their symptoms and clinical course with few exceptions; that is, the patient complains of a slowly enlarging lump of several weeks' or months' duration in the submaxillary area. To palpation these tumors tend to be firm, discrete and often nodular. It has already been mentioned that there is a higher percentage of malignant tumors in the submaxillary gland as compared with the parotid. Although there are no symptoms referable to the seventh cranial nerve in cases of submaxillary tumors, this gland is closely associated with the lingual branch of the trigeminal nerve (sensory), so that pain is often a prominent early symptom, especially in the invasive malignant growths.

DIAGNOSIS

There are several neoplastic and chronic inflammatory lesions in or about the parotid and submaxillary glands which clinically may simulate a benign or primary malignant tumor in these structures and which must be considered in the differential diagnosis. These are chronic parotitis, inflammatory hypertrophy of the preauricular lymph nodes, lymphoma, Boeck's sarcoid, cervical neurofibroma or schwannoma, branchiogenic cyst, Warthin's tumor (papillary cystadenoma lymphomatosum) and metastatic cervical cancer (from the scalp or eye, especially melanoma). A calculus in the submaxillary salivary gland or Wharton's duct is frequently associated with chronic sialitis and clinically may resemble a growth in this structure in every way. A diagnosis of calculosis may be established by roentgenographic studies.

Although there are numerous features in the history and physical examination which help in the differential diagnosis of tumors of the major salivary glands a definite diagnosis can only be made by biopsy. Aspiration biopsy is of distinct value in establishing a histologic diagnosis of a neoplasm in the parotid or submaxillary gland, for if an incisional biopsy with subsequent postoperative scarring can possibly be avoided, exposure and excision of a tumor in the parotid or submaxillary regions can be technically more easily accomplished.

The occurrence of tumors in the sublingual salivary gland is rare, and the diagnosis invariably difficult. It must be distinguished from cancer of the floor of the mouth. Growths in the latter region, whether benign or malignant, will be found to extend into the floor of the mouth anteriorly. It may sometimes be difficult to differentiate clinically between sublingual and submaxillary tumors. If the mass is situated in the floor of the mouth but apparently not arising from mucous membrane, a tentative diagnosis of tumor of the sublingual salivary gland may be made.

TREATMENT

In general, tumors of the salivary glands are not radiosensitive and the only effective method of treatment is surgical. As already mentioned, the clinical course of these neoplasms is always progressive with a tendency toward malignant degeneration. In the parotid, paralysis of the facial nerve will eventually occur in most cases whether or not the tumor is malignant. For these reasons all tumors of the salivary glands should be excised and the earlier the neoplasm is removed the better the prognosis. The argument that parotid tumors should be allowed to "ripen" before they are excised is fallacious. If such a policy of procrastination is followed, nothing is accomplished except to permit the growth to progress and possibly undergo malignant changes

In considering the operative approach for parotid tumors, the surgeon should realize that these growths are often deceptive in that on clinical examination they appear to be more superficial and accessible than actually proves to be the case on operation. For this reason, many patients with parotid tumors are operated on in doctors' offices or in hospitals with incomplete preparation and limited surgical exposure, only to find a deep-seated growth of unanticipated proportions and extent which cannot be completely removed with such inadequate facilities.

The surgical exposure for excision of a parotid tumor should be liberal—usually in the form of a Y incision, two arms of which run up in front of and in back of the lobule of the ear and a third arm of which is extended downward and forward into the upper part of the neck. The surgeon should decide in the beginning whether in the given case adequate hemostasis requires preliminary ligation of the external carotid artery, which can be accomplished through the lower arm of the incision. One of the most important precautions in the removal of a parotid tumor is avoidance of injury to the seventh cranial nerve. The best way to prevent such an accident is first actually to expose the main trunk of the nerve where it emerges from the stylomastoid foramen and then to proceed to dissect out the growth. Exposure of the major branches of the facial nerve is essential for an adequately wide removal of a deeply seated tumor. Obviously, if the nerve or one of its major branches has been invaded by cancer, it must necessarily be sacrificed for the more important purpose of saving life. In general, it can be stated that a surgeon should not attempt the removal of a parotid tumor unless he has previously dissected out this gland in a cadaver with preservation of the facial nerve and its plexus. The undergraduate instruction on the anatomy of the facial nerve given in medical schools is inadequate preparation for one who is to cope with this operation.

The question of neck dissection at the time of removal of the parotid tumor must be determined on the basis of the morbid anatomy and histologic character of the growth.

The tumor of the submaxillary salivary gland offers no difficulty from the surgical standpoint. Its removal requires only complete dissection of the submaxillary triangle; this area contains no important structures except the hypoglossal nerve and the lingual branch of the fifth cranial nerve, which are readily accessible and easily preserved. If invaded by the growth, either one of these structures can be sacrificed. In the excision of a submaxillary tumor it is important to determine beforehand whether the lesion is benign or malignant. If the neoplasm is malignant (adenocarcinoma, adenoid cystic carcinoma, etc.), a block dissection of the neck should be done at the same time.

PROGNOSIS AND END RESULTS

So far as benign mixed tumors are concerned, the growth itself rarely results fatally. With proper treatment (complete surgical excision) a cure rate of 100 per cent should be obtained in previously untreated benign tumors, and almost 100 per cent even in previously treated patients, that is, in those with incomplete excision or pronounced scarring and fibrosis due to radiation therapy.

Nevertheless, these benign growths do constitute an eventual hazard to life, since they may undergo malignant transformation. While many tumors of the major salivary glands are malignant from their inception, others develop from preexisting benign mixed tumors. Just exactly at what point during this gradual transition a given growth should be classified as benign or malignant is difficult to specify. Since the morphologic composition of a series of tumors of the major salivary glands is so variable, the five year cure rate cannot be stated with certainty. It may be said, however, that in those tumors regarded as histologically malignant by the pathologist a 40 to 50 per cent five year cure rate may be expected with proper treatment.

In large tumor clinics it is found that about 50 per cent of patients with parotid tumors (both benign and malignant) give a history of inadequate surgical removal before admission. Even in these, the rate of cure with proper treatment should be relatively high. The dangers of such incomplete removal are (1) that later extension of the growth or subsequent surgical treatment may cause permanent injury to the facial nerve and (2) that over a period of years with repeated recurrences a benign tumor may become malignant.

VI. CANCER OF THE PARANASAL SINUSES

The paranasal (nasal accessory) sinuses consist of the paired maxillary antrums, ethmoids, sphenoids and frontal sinuses. This system of air-filled structures intercommunicate with one another and with the middle meatus of the nasal cavity.

When cancer occurs in the mucosa of these spaces or their extensions, the growth progresses toward and tends to extend into the nasal cavity. In a large proportion of cases more than one of the sinuses are involved. Tumors originating in the ethmoid cells tend to grow forward toward the nasal cavity and antrum, laterally into the orbit or backward into the sphenoids. When cancer of the maxillary sinus arises on the mesial and upper walls, there is frequently invasion of the ethmoids, so that it is often difficult to determine the exact anatomic site of the origin of the tumor. Growths of the frontal sinus occur so rarely that for practical purposes they may be disregarded in this discussion. Similarly, the frontal sinuses do not often become involved secondarily by extension from tumors of other paranasal sinuses.

Malignant tumors of the paranasal sinuses occur with relative infrequency, comprising about 0.2 per cent of all human cancer and about 3 per cent of cancer in the upper respiratory and alimentary tracts. Growths in this locality are encountered more often in males (65 per cent) than in females, and in the age group of 60 to 70 years; the median age is 54 years.

There are no known causative factors for this disease. Although one might expect such lesions as chronic sinusitis, hypertrophic changes in the mucosa and polyps to precede the formation of cancer in this region and possibly contribute to its etiology, no acceptable evidence has been advanced to support such a causal relationship.

PATHOLOGY

As with most forms of cancer in the upper respiratory and alimentary tracts, the predominant morphologic variety found in the paranasal sinuses is epidermoid or squamous carcinoma. This is to be expected, since the nasal accessory sinuses are lined with a pseudo-

stratified columnar type of epithelium. Occasionally, adenoid cystic carcinoma arises in this area. Anaplastic carcinoma, spindle cell sarcoma, lymphosarcoma and malignant mucoepidermoid tumors are but rarely encountered in this region. There are numerous distinct morphologic varieties of benign and malignant neoplasms that occasionally involve the nasal accessory sinuses secondarily by extension, such as osteogenic sarcoma, ossifying fibroma, juvenile nasopharyngeal fibroma, adamantinoma and epidermoid carcinoma or adenocarcinoma originating in the nasal cavity, gum or hard palate.

SYMPTOMS, MORBID ANATOMY, AND CLINICAL COURSE

There is practically only one initial symptom in cancer of the paranasal sinuses—namely swelling, usually occurring externally in the cheek, floor of the orbit or bridge of the nose. If the growth arises in the floor of the antrum, swelling will often appear in the hard palate, the alveolar ridge or the gingival buccal gutter. Ordinarily, there is little pain or discomfort in the early stages. The second most frequent symptoms are nasal obstruction and a bloody discharge from the nose.

The occurrence of swelling (asymmetry) in the cheeks or palate as the initial symptom in cancer of the paranasal sinuses is always significant, since it indicates that in practically all cases the growth has already invaded bone at some point in order to have reached the subcutaneous tissues. In cancer of the ethmoid such erosion may occur in the nasal wall of the orbit, displacing the eye outward. When the floor of the orbit is the seat of tumor invasion, the eyeball is elevated with unilateral exophthalmos. Erosion of the anterior or nasal walls of the antrum is associated first with swelling of the cheek and nasal obstruction and later with enlargement of the hard palate and obliteration of the gingival buccal gutter.

As the disease progresses and a greater portion of the maxilla becomes invaded by tumor, enlargement of the face becomes considerable, with pronounced displacement of the eye. There is often associated cellulitis and sepsis. Eventually, death occurs mainly from local extension of the disease. Metastasis usually occurs during the late stages of the disease when the local growth has not been controlled, and seldom becomes an important clinical problem in the treatment of cancer of the nasal accessory sinuses. In fatal cases the patient usually succumbs from the local effects of the disease before metastasis becomes manifest.

TREATMENT

The surgical excision of the paranasal sinuses has always been regarded as a difficult and hazardous procedure. Complete removal of the frontal, ethmoid and sphenoid sinuses is practically impossible, since this procedure would involve the sectioning of a portion of the base of the skull. Extirpation of the antrum can be accomplished by total excision of the maxilla, including the floor of the orbit. For these reasons radiation therapy has been widely employed for many years in the treatment of cancer of the nasal accessory sinuses. The results from this method of treatment, however, have been disappointing.

Cancer-lethal doses of radiation in this region will invariably produce serious complications, such as ocular edema, panophthalmitis and edema of the mucous membranes of the nasal cavity with obstruction to drainage and pansinusitis. Like all surface cancers, growths arising in the mucosa of the paranasal sinuses are ulcerated and infected from the beginning, and when drainage is blocked suppuration must occur. For this reason radiation therapy, even though it may sterilize the cancer, is so frequently followed by pansinusitis and sepsis that wide surgical exposure and drainage are required eventually. If the latter procedure is to be adequate, it must be of such scope as to be a little short of a radical resection; in many cases the latter procedure would have been sufficient to effect permanent control if used in the beginning.

From past experience and a review of the literature, one cannot escape the conclusion that the salvage rate in cancer of the paranasal sinuses is disappointing and the complications of cancer lethal radiation in this region almost always call for radical surgery. These considerations certainly suggest a greater resort to radical surgery in the beginning with an attempt to remove the tumor completely, or, failing that, to provide adequate drainage and assure sufficient removal of the growth so that radiation therapy can be more effectively applied. Such a surgical approach to the problem with a greater degree of safety to the patient has been made possible since the advent of chemotherapy, antibiotics, blood banks, improved surgical and anesthesia technics and recent advancements in the problems of nutrition.

If the growth is confined to the antrum, especially at the floor and in its lower portion, wide resection of the maxilla can be carried out with little risk to the patient. If the floor of the orbit is involved by tumor, the operation should include exenteration of the orbit, since removal of its bony floor is commonly followed by herniation of the orbital contents. When the growth extends into the ethmoids or sphenoids, these structures can be thoroughly curetted. In brief, it seems reasonable to attempt the widest possible excision of the growth and to use radiation therapy later, usually through the maxillary defect, in the event that recurrences take place.

PROGNOSIS AND END RESULTS

Since cancer of the paranasal sinuses produces symptoms only after erosion of bone and extension into the nasal cavity or soft parts of the cheek or orbit, the growth is usually well advanced when the patient first seeks medical advice, that is, several centimeters in diameter with extension into the contiguous structures. From the standpoint of early diagnosis, the outlook is poor, since early cancer in these areas is silent in its symptoms, in contrast to growths in such areas as the lip, anterior portion of the tongue and vocal cords. As has already been mentioned, both radiation therapy and surgical treatment have been limited and hazardous in this particular region—radiation therapy because of its complications and surgical treatment because of the impossibility of an extensive resection at the base of the skull.

No figures have been published as to the over-all cure rate (all comers) in cancer of the nasal accessory sinuses. At the Memorial Hospital, the most recently calculated five year cure rate, both surgical treatment and radiation therapy being used, with the main and primary reliance on surgical treatment, is about 13 per cent.

Clinical Notes, Suggestions and New Instruments

RISK OF UREMIA DUE TO SODIUM DEPLETION

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It would be unfortunate if the comments of Allen[1] were widely interpreted as minimizing the risks inherent in sodium depletion. While it is true that observations of a large requirement of sodium and a dramatic rise of the level of blood urea in patients with nephritis who receive a diet restricted in sodium are somewhat unusual,[2] less rapidly developing, but equally dangerous, changes occur not infrequently when sodium depletion is employed routinely for congestive cardiac failure and for hypertension.

The case histories noted herein are only 3 of the many which have impressed me with the importance of observing the levels of blood urea or creatinine in any patient receiving such treatment.

Report of Cases

CASE 1.—R.M., a 38 year old bookkeeper, entered the hospital because of impaired vision of the left eye, which had occurred suddenly six days previously and had persisted until admission. He had relatively good health until this occurrence and then experienced anorexia, mild nausea and belching without hiccoughing, with one episode of vomiting on the night prior to entry. Nocturia, with urination on an average of three times during the night, had been present for an indefinite period.

Physical examination revealed blood pressure of 230 systolic and 160 diastolic, grade 4 hypertensive retinopathy, with a particularly large hemorrhage in the left fundus, the heart enlarged to the sixth intercostal space, with a gallop rhythm and a soft systolic murmur at the apex, and moist rales at the base of both lungs.

Examinations of the urine repeatedly yielded albuminuria (2 to 3 plus), occasional granular casts, red blood cells and white blood cells. The specific gravity was fixed at 1.011 and 1.012, and the hemoglobin varied from 9 to 11 Gm. A teleroentgenogram of the chest visualized an enlarged heart with congestive changes.

Because of the signs of mild congestive cardiac failure, the patient was given a Kempner diet (sodium 200 mg. per day). In addition, four injections of meralluride ("mercuhydrin sodium solution"), 2 cc., were given during the second week of hospitalization.

The blood urea, which was 37 mg. per hundred cubic centimeters (creatinine 1.9) on admission, rose steadily during the ensuing two weeks to a level above 200 mg. (creatinine 3.8), at which time the patient became clinically uremic and exhibited pericardial friction, which persisted for two and a half weeks. The urea remained at the elevated level for another week, at which time a regular diet was given. This was accompanied with an immediate and striking fall in the level of blood urea; by the end of the week it had fallen to 134 mg. per hundred cubic centimeters (creatinine 2.4) and the patient had improved.

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1. Allen, F.M.: Hypertension, Correspondence, J.A.M.A. 130:202 (Jan. 17) 1948.

2. Thorn, G.W.; Koepf, G.F., and Clinton, M., Jr.: Renal Failure Simulating Adrenocortical Insufficiency, New England J. Med. 231:76 (July 20) 1944.

The urea levels were followed up intermittently thereafter; two months later it was 44 mg. (creatinine 2.2) and another month later 87 mg. per hundred cubic centimeters (creatinine 2.1). However, during these months there was a steady downhill course, in which the patient experienced several episodes of cardiac failure (left); severe secondary anemia developed, and he died seven months after his first admission.

CASE 2.—B.S., a 57 year old Russian widow, entered the hospital because of symptoms of mild congestive cardiac failure. She had had diabetes mellitus for twenty-five years, requiring a maximum of 75 units of insulin in 1925; this amount was steadily diminished during later years, until on admission she was maintained free of urinary sugar without insulin. Hypertension, with the pressure above 200, was known to have existed since 1931. Two episodes of pyelitis or pyelonephritis had occurred. A gynecologic operation, presumably a complete hysterectomy, had been performed at the age of 22, a year following which she had reached her maximum weight of 300 pounds (about 136 Kg.).

For approximately one and a half years there had been progressive deterioration of vision, not improved with spectacles, and for the same period mild to moderate dyspnea on exertion, with several episodes of paroxysmal nocturnal dyspnea. It was because of a mild exacerbation of the latter that the patient sought admission. She now weighed 178 pounds (about 81 Kg.), and the blood pressure, which had been 170 systolic and 88 diastolic, fell to 120 to 140 systolic and 80 diastolic within one week and remained at that level. There was grade 3 retinopathy and an enlarged heart, with signs of mild congestive failure. Significant laboratory tests revealed a urinary output of fixed specific gravity, with 1 plus albuminuria and an occasional white blood cell and granular cast, and moderate secondary anemia, with a hemoglobin content of 8 Gm. A roentgenogram of the chest showed an enlarged heart with mild congestive changes. A roentgenogram of the skull revealed generalized hyperostosis, predominantly of the frontal and occipital bones. The basal metabolic rate was plus 1 per cent. Urinary ketosteroids were within normal limits. The glucose tolerance curve was normal.

Because of the signs of congestive failure a diet low in salt content was employed. However, by the ninth day the blood urea (90 mg. per hundred cubic centimeters on admission) had risen to 220 mg. and weakness and diarrhea had developed. On the eleventh day a diet containing 20 Gm. of protein and 9 Gm. of salt was given. The urea fell to 150 mg. after fourteen days of the high salt and low protein regimen and reached 85 mg. per hundred cubic centimeters after thirty-five days.

CASE 3.--Mrs. M.M., a 70 year old Scotswoman, entered the hospital because of an exacerbation of symptoms of congestive cardiac failure. Previous hospitalization had revealed a mitral valvular lesion, with auricular fibrillation associated with a patent intra-auricular septal defect. Hypertension (210 systolic and 140 diastolic and 180 systolic and 110 diastolic) had been noted on two previous admissions; with a regimen of bedrest and sodium depletion the blood pressure fell in the course of several weeks to 110 systolic and 80 diastolic and 138 systolic and 84 diastolic, respectively, paralleling improvement in the congestive failure, although it had been observed repeatedly that she had little cardiac reserve. At no time had a level of blood urea above 24 mg. per hundred cubic centimeters been noted. Examination of the urine had revealed a low specific gravity; with a trace of to 1 plus albumin and an occasional red blood cell seen microscopically. Examination at

the time of this entry revealed a blood pressure of 150 systolic and 90 diastolic, which fell to 130 systolic and 80 diastolic, and the signs of severe congestive failure.

The patient was again given a sodium depletion regimen, including mercurial diuresis, the house staff having taken into account previous responses and a level of urea of 40 mg. per hundred cubic centimeters on admission. Some improvement was noted, but the patient never again reached the ambulatory state. After three weeks of treatment the patient was noted to have become weak, anorexic, nauseated and drowsy. Two determinations of blood urea at this time were above 160 mg. per hundred cubic centimeters. She was given 9 Gm. of salt in the next twenty-four hours and 4 Gm. a day thereafter. Within six days the urea had fallen to 40 mg., and was only 50 mg. per hundred cubic centimeters several weeks later. The dosage of salt was lowered when the signs of congestive failure increased, but, despite efforts to maintain a balance in sodium administration, there was asteadily downhill course, and the patient died of cardiac failure about one month after her uremic episode.

Conclusions

The 3 cases reported herein (case 1, with malignant hypertension; case 2, with Morgagni-Moore-Morell syndrome and renal insufficiency secondary to either intercapillary glomerulosclerosis or chronic pyelonephritis with nephrosclerosis, and case 3, with rheumatic valvular disease, probably with nephrosclerosis) demonstrate the variety of diseases in which uremia may be encountered as a response to sodium depletion. It is again emphasized that these are not at all infrequent occurrences and that, in order to avoid such consequences, it is wise to watch carefully the levels of blood urea (or creatinine) in all patients on a sodium depletion regimen, especially in those in those in the older age groups and in those in whom renal disease is suspected or known to exist.

SEVERE ACUTE RENAL INSUFFICIENCY WITH RECOVERY

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Transurethral prostatectomy, with water as the irrigating fluid, is associated with prominent intravascular hemolysis, following which acute renal insufficiency develops in a proportion of cases.[1] This syndrome of acute renal insufficiency has been given various designations, such as the "renal anoxia syndrome,"[2] "lower nephron nephrosis"[3] and "hemoglobinuric nephrosis."[4] It has become apparent that the syndrome may result from a multiplicity of other causes, among which may be included prolonged hypotension (the shock state),[5] incompatible (hemolytic) blood transfusion reactions,[6] crush injuries,[7] carbon tetrachloride poisoning,[8] uteroplacental damage[9] and certain infections.[10] The clinical picture and renal lesions are similar, regardless of the causative background. An outstanding feature of this syndrome has been the high rate of mortality.

The methods of treatment for this condition have varied. The occasional spontaneous recovery in isolated cases has for some time demonstrated the reversible nature of the process involving the kidneys. Various forms of artificial measures for clearing waste products from the body have been attempted as means of sustaining patients through the critical period, until the kidneys initiate sufficient function once more. These artificial measures include gastric lavage,[11] peritoneal irrigation,[12] a combination of peritoneal irrigation and gastric lavage[13] and an artificial kidney for in vivo dialysis.[14] Renal decapsulation has been advocated by some[15] and rejected by others.[16] In reported cases generalized subcutaneous edema and pulmonary edema have been frequently mentioned complications. More recently, pleas for a con-

1. (a) Creevy, C. D., and Webb, E. A.: A Fatal Hemolytic Reaction Following Transurethral Resection of the Prostate Gland, Surgery 21:56-66, 1947. (b) McLaughlin, W. L.; Holyoke, J. B., and Bowler, J. P.: Oliguria Following Transurethral Prostate Resection, J. Urol. 58:47-60, 1947. (c) Muirhead, E. E.; Haley, A. E.; Habermann, S., and Hill, J. M.: Acute Renal Insufficiency Due to Incompatible Transfusion and Other Causes, with particular Emphasis on Management, Blood (supp. 2) 3:101-138, 1948. (d) Landsteiner, K. K., and Finch, C. A.: Hemoglobinemia Accompanying Transurethral Resection of the Prostate, New England J. Med. 237:310-312, 1947. (e) O'Brien, H. A.: Personal communication to the authors.

2. Haegraith, B. G.; Havord, R. E., and Parsons, D. S.: Renal Syndrome of Wide Distribution Induced Possibly by Renal Anoxia, Lancet 2:293-296, 1945.

3. Leche, B.: Lower Nephrosis, Mil. Surgeon 99:371-396, 1946.

4. Mallory, T. B.: Hemoglobinuric Nephrosis in Traumatic Shock, Am. J. Path. 17:427-443, 1947.

5. Corcoran, A. C., and Page, I. J.: Post-Traumatic Renal Injury, Arch. Surg. 51:93-101 (Sept.) 1945.

6. DeGowin, E. L.; Warner, E. D., and Randall, W. L.: Renal Insufficiency from Blood Transfusion, Arch. Int. Med. 61:609-630 (April) 1938.

7. Bywaters, E. G. L., and Dible, J. H.: Renal Lesion in Traumatic Anuria, J. Path. & Bact. 56:111-120, 1942.

8. Pearson, C. C.: Carbon Tetrachloride Poisoning, Proc. Staff Meet., Mayo Clin. 22:314-320, 1947.

9. Young, J.: Renal Failure After Utero-Placental Damage, Brit. M. J. 2:715-718, 1942.

10. Yorke, W., and Nauss, R. W.: Mechanism of Suppression of Urine in Blackwater Fever, Ann. Trop. Med. & Parasitol. 5:287-313, 1911.

11. Vermooten, V.: Personal communication to the authors.

12. (a) Frank, H. A.; Seligman, A. M., and Fine, J.: Treatment of Uremia After Acute Renal Failure by Peritoneal Irrigation, J. A. M. A. 130:703-705 (March 14) 1946. (b) Abbott, W. E., and Shea, P.: The Treatment of Temporary Renal Insufficiency (Uremia) by Peritoneal Lavage, Am. J. M. Sc. 211:312-319, 1946. (c) Goodyear, W. E., and Beard, D. E.: The Successful Treatment of Acute Renal Failure by Peritoneal Irrigation, J. A. M. A. 133:1208-1210 (April 19) 1947. (d) Rhoads, J. E.: Peritoneal Lavage in the Treatment of Renal Insufficiency, Am. J. M. Sc. 196:642-647, 1938. (e) Muirhead, E. E.; Small, A. B.; Haley, A. E., and Hill, J. M.: Peritoneal Irrigation for Acute Renal Damage Following Incompatible Transfusion: A Discussion Based on Three Cases, J. Lab. & Clin. Med. 32:988-1001, 1947.

13. Bassett, S. H., and Others: Nitrogen and Fluid Balance in Treatment of Acute Uremia by Peritoneal Lavage, Arch. Int. Med. 80:616-636 (Nov.) 1947.

14. Kolff, W. J., and Berk, H. T. J.: The Artificial Kidney: A Dialyser with a Great Area, Acta med. Scandinav. 117:121-134, 1944. Murray, G.; Delorme, E., and Thomas, N.: Development of Artificial Kidney: Experimental and Clinical Experiences, Arch. Surg. 55:505-522 (Nov.) 1947. Alwall, N.; Norwitz, L., and Steins, A. M.: Clinical Extracorporeal Dialysis of Blood with Artificial Kidney, Lancet 1:60-62, 1948.

15. Abeshouse, B. S.: Renal Decapsulation: A Review of the Literature and Report of Ten Cases, J. Urol. 53:27-84, 1945.

16. Culpepper, W. S., and Findley, T.: Renal Decapsulation for Oliguria and Anuria, Am. J. M. Sc. 214:100-108, 1947.

servative consideration of the fluid intake in these cases have been expressed.[17]

The clinical course in patients with the acute renal insufficiency syndrome (lower nephron nephrosis) lends itself well to a division into three phases, namely: (1) the phase of renal damage, during which hypotension is frequently present, (2) the phase of renal insufficiency and (3) the phase of diuresis. The various features of these phases have been discussed elsewhere.[18]

The renal lesions are characterized by damage to renal tubules, which is reflected microscopically by degeneration and focal necrosis. The distal segment of the nephron apparently sustains the greatest damage. Regeneration and recovery of these tubules become evident after about eight to ten days and are well advanced in twelve to fourteen days. It is of correlative interest that patients sustained through these intervals usually recover.

The belief has been expressed that the high rate of mortality of the past seems due to the type of management[19] and that a type of treatment based on the main abnormalities exhibited during each of the three phases can reduce the rate to low levels. This conclusion was originally expressed[1c] following treatment in 11 cases of severe disease with the "three phase" management. At the present time the series includes 20 cases of severe renal insufficiency so managed by one of us (E.E.M.) The 2 fatalities resulted from diffuse damage to the brain demonstrated in autopsies.[1c] The 2 patients had entered the phase of diuresis, thus indicating satisfactory progress of the renal disease.

In the case herein presented the disease was severe, and the satisfactory recovery affords additional support to the expressed contention. There were several unique features involved. The patient was a paraplegic war casualty with a cord bladder. Hemoglobinemia was observed following the transurethral resection of a small amount of bladder neck tissue to improve drainage. Water was used as the irrigating fluid during the operation. Pyelonephritis was known to be a complicating condition. Since the patient had no sensations, no anesthesia was given. No blood or other fluids were administered during the operation. Therefore, except for the pyelonephritis this was a case of acute renal insufficiency following transurethral resection, that is, one without the possible complication of blood transfusion reaction or anesthesia.

REPORT OF A CASE

E.P., aged 33, had had a cord injury, with complete functional transection of the spinal cord in the lower dorsal area, while in the military service. A suprapubic cystostomy had been performed while he was in the army, but the incision had been healed for many months. He was admitted to the Veterans Hospital (Dallas) because of pain, swelling and redness at the site of the old cystostomy incision. Urine drained through a small sinus in the incision, but this sinus healed when a urethral catheter was left in for a few days. The old wound would reopen and drain whenever the catheter was removed. After cystoscopic examination it was decided to resect the bladder neck. Complete anesthesia from the costal margin down existed, and no anesthetic was needed. On May 9, 1947, the patient was allowed a light breakfast and was taken to the operating room after receiving 1.5 grains (0.1 Gm.) of pentobarbital sodium. No fluids of any sort were given intravenously during the operation. There was no difficulty in passing the 28 F McCarthy resectoscope, and 3 to 4 Gm. of tissue was easily removed. A slight amount of oozing of blood was easily controlled with the Foley bag. The patient left the operating room in good condition, with no bleeding. On being returned to the ward and being placed on his bed he stated that he felt a little chilly, but had no other complaints. One hour later the patient was in severe shock, with systolic blood pressure of 50 and diastolic pressure of 30 mm. of mercury, rapid and almost imperceptible pulsations, cyanosis and dyspnea. There had been no irrigation. The urine from the catheter was bloody in appearance, and irrigation was promptly started. There were no clots in the bladder and the catheter was not obstructed. It was thought at first that the patient was bleeding, and he was immediately returned to the operating room. While typing and crossmatching for transfusion were carried out, 500 cc. of normal plasma was given. The resectoscope was reinserted, but there were no bleeding points or clots in the bladder. It was then noted that the serum from the blood sample for the transfusion tests was dark red. Subsequent blood samples likewise demonstrated prominent hemoglobinemia. It was realized that the patient had had a hemolytic reaction of the type described by Creevy and Webb,[1] due to the distilled water used during resection. A transfusion of 1,000 cc. of blood and 1,000 cc. of 5 per cent dextrose in water was given, and the blood pressure rose to within normal limits in two hours. The patient was restless and cyanotic for the first few days, and hiccoughs developed, which persisted for ten days. With a closed irrigating system the bladder was continuously irrigated. The fluid remained slightly bloody at all times. Because of the irrigation, there was no record of the urinary output for the first three days. The first measure of urinary output was 60 cc. on the fourth day. Subsequently, all twenty-four hour volumes of urine were obtained by catheter and accurately measured.

The charts and the table depict the progress in this case. On the second day hyperbilirubinemia was definite (elevated serum bilirubin

17. Muirhead, Haley, Haberman and Hill.[1c] Landsteiner and Finch.[1d] Lattimer.: A Plan for the Management of Anuria, J. Urol. 54:312-317, 1945.
18. Muirhead, Haley, Haberman and Hill.[1c] Muirhead, E. E., and Hill, J. W.: The Treatment of Acute Renal Insufficiency, Surg., Gynec. & Obst., to be published.
19. Musgrave, Havard and Parsons.[2] Lucke.[3]

and icterus index), thus confirming the hemolytic episode. A severe grade of renal failure developed. The renal insufficiency was characterized by decided oliguria, sharp and prominent elevation of blood nonprotein nitrogen and urea concentrations, decrease in the carbon dioxide combining power of plasma and decrease in the concentrations of blood chloride and serum sodium. The urine samples were of low specific gravity and contained a low concentration of urea, varying between 13 and 23 per cent of normal. The plasma protein concentration was moderately depressed, but remained near the same level throughout the course. The urinary urea output was negligible for ten days. After the fourth day the urinary drainage had a purulent appearance, but this cleared when the volume of urine subsequently increased.

cases.[1c] Treatment was in May and June, which in Texas meant a relatively high environmental temperature. It was therefore considered that the daily insensible water loss and visible sweating amounted to 1,500 to 2,500 cc. (plus or minus). Diarrhea developed, and the stools were sufficiently liquid to be measured in volume. A rectal tube was inserted, and the liquid stools were collected. Moreover, edema of the paralyzed lower limbs became definite. With diarrhea, sweating and paralytic edema, the effective salt loss was increased over that in former cases. Therefore, an amount of salt greater than the urinary loss was given early (table). During the period of prescribed salt intake (fourth to fifteenth day) the salt loss by urine and stools was estimated to amount to over 100 Gm. The oral salt intake during this period amounted to 56 Gm. of

Progress in the Case Reported

Day	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	24	28
Urinary output (cc.)	9	7	9	60	180	300	450	625	660	860	1,000	1,325	2,050	2,660	3,750	5,075	5,400	5,400	5,220	5,000		3,000	2,050
Stool output (cc.)									645	1,100	1,300	500	505	425	225	125	300	300					
Total intake (cc.)	2,500	2,500	2,570	2,000	3,030	1,750	2,500	3,000	3,565	4,450	3,900	4,550	3,860	7,080	7,160	6,490	6,230	5,700	6,130	5,320			
Nonprotein nitrogen (mg./100 cc.)		67		107	129	140	155																
Blood urea (mg./100 cc.)					190	240	244	250	248	268	278	263	269	235	197	203	-	161	102	103	124	51	49
Carbon dioxide-combining power (vol./100 cc.)		59.6		56	61.2	60.6	52.3	55	52.3	52.3	50.4	52.3	50.4	54.1	52.3	46.6		54.1	56.1	56	54	56	56
Icteric index		21.6																					
Serum bilirubin (mg./100 cc.)		3.4																					
Plasma sodium chloride (mg./100 cc.)		462			429	380	393	417	425	421	437	440	454	462	450	452	470.5		503	519	515	495	570	586
Serum sodium (mEq./L.)					126		133		139		134			135	132		153			149				
Serum potassium (mEq./L.)					6.3		5.0		5.6		6.3			6.1	5.1		6.7			6.7				
Plasma protein (Gm./100 cc.)		5.8			5.0		6.9	6.9				5.6		6.4		5.5			5.6			6.3		
Albumin		3.8			3.3		3.3	3.6				3.0		3.7		3.4			3.0			3.6		
Globulin		2.1			1.7		1.6	1.5				2.6		0.7		2.1			1.0			2.7		
Urine sodium chloride (mg./100 cc.)						267	375	309	430	310	293	260	219	219	204	221	230		193	201	194	264	388	429
Urine chloride (Gm.)						0.48	1.1	1.3	2.7	2.0	2.5	2.7	2.9	4.5	5.5	8.3	12.4		10.4	10.5	9.7		11.4	12.2
Urine urea (mg./100 cc.)						420	240	270	340	360	394	407	441	438	426	312	330		300	257	257	263	385	454
Urine urea (Gm.)						0.77	0.74	1.19	2.1	2.4	3.39	4	5.8	9.4	11.3	11.7	16		16.2	13.6	12.8		10.6	13
Blood (cc.)	1,000	1,000	500		500	5,000	500	500															
Plasma (cc.)	500	500																					
Dextrose 5% in water (cc.)	1,000	1,000	1,000													1,000							
Solution I (cc.)*					1,000						1,000	1,000		2,000	2,000	400							
"Amigen 5%" in dextrose																1,000							
"Puremamine" (Gm.)†				15																			
Isotonic solution of sodium chloride				1,000																			
Hemoglobin (Gm./100 cc.)		10.0		11.6		11.6	13.2		14.4			13.2		11.2									
Red blood cells (millions)		3.9		3.85		3.7	4.2		4.6			4.1		3.6									
Sodium chloride (Gm.) by mouth							6	6	6	6		6		6	6	3							
Sodium bicarbonate (Gm.) by mouth						6	6	6	6	6	6	6	6	6	6	3							

*Solution I contained sodium chloride, sodium bicarbonate and calcium chloride.
†A casein hydrolysate prepared by acid digestion.

Treatment in this case was in accordance with the previously described "three phase" management.[1c] For the hypotension (shock state) of the first phase and the subsequent anemia that developed, blood transfusions were given. A total of 4,500 cc. of blood was given in eight days, 2,000 cc. being given during the first forty-eight hours. Initially, while blood was procured, 500 cc. of plasma was given. The following steps were observed during the second phase (renal insufficiency): (1) An attempt was made to maintain the state of hydration near normal, and an overload of salt and water was stringently averted; (2) the fluid allowed by mouth was given as a high caloric formula and as fruit juices; vitamin B complex was given parenterally, and, thus, complete starvation was prevented, and (3) the tendency toward acidosis was checked with sodium bicarbonate given by mouth.

The fluid-salt balance in this case posed a special problem not encountered in the earlier

sodium chloride and 66 Gm. of sodium bicarbonate. As the diuresis developed, toward the latter part of this period, and the patient exhibited clinical signs of extracellular fluid deficit, additional salt and water were given by vein (total of 59 Gm. of sodium chloride and 25 Gm. of sodium bicarbonate). It therefore follows that, with the losses through the urine, stool, skin and paralytic edema, the instituted salt therapy can be estimated to have approached a balance. This thinking applied at that time seems as reasonable in retrospect. It should be pointed out that, as on previous occasions,[1c] about half of the sodium bicarbonate was given to combat hyponatremia and acidosis. The latter is an empiric measure which seems to have merit. The apparent effectiveness of this measure was demonstrated by the elevation of the concentration of serum sodium and the maintenance of the carbon dioxide-combining power at the lower limits of normal.

Not only was there pronounced hyponatremia

but also prominent hypochloremia. The dilution of these two ions in the extracellular compartment has been a constant observation in the syndrome of acute renal insufficiency. In the present case this abnormality was apparently aggravated by the salt loss via the bowels and the skin. The dilution of these ions occurs, however, even in the absence of such an outward exit. This hypotonicity cannot be ascribed

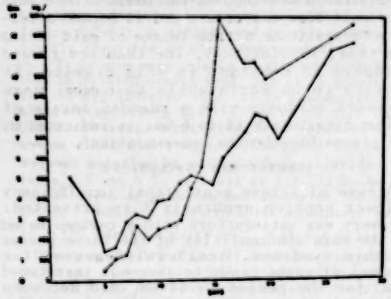


Fig. 1.—Chart showing determinations of urea in the blood (represented by the unbroken line, in milligrams per hundred cubic centimeters) and in the urine (represented by the unbroken line, in grams).

to fluid dilution, as it can be observed in patients obviously exhibiting extracellular water deficit.[18] Internal ionic shifts, of a poorly understood nature, must be the basis for this abnormality. Moreover, this abnormality seems directly related to the renal insufficiency, as the return of these ions to normal concentration parallels the return of the renal function (fig. 1 and fig. 2).

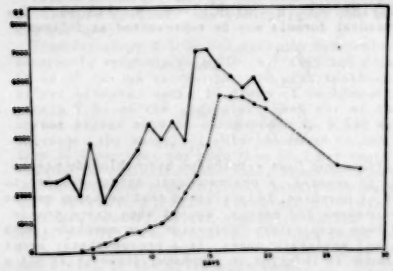


Fig. 2.—Chart showing the total intake of fluid (represented by the unbroken line) and the output of urine (represented by the broken line)

No positive measure was taken to lower the concentration of the blood urea and other accumulated wastes. Experience has indicated that the improvement of renal function occurs before these concentrations and the general backlog reach levels of an irreversible degree. In most cases the hypochloremia was not so severe as in this case, and no attempt was made to combat it as in this instance.

As on former occasions, no attempt was made to force the kidneys to produce urine. Attempts to replace the estimated daily water-salt loss (fig. 3 and fig. 4) were instituted, and renal regeneration was allowed to proceed without "prodding." There was no provision for weighing this patient, and during the second week a

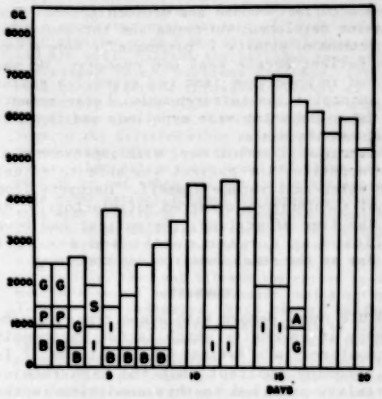


Fig. 3.—Chart showing the administered amounts of plasma (P), blood (B), sodium bicarbonate (I), 5 per cent "amigen solution" (a hydrolysate of casein prepared by digestion with porcine pancreas) (A), isotonic solution of sodium chloride (S), dextrose (G) and fluid by mouth (unlabeled part of bars).

moderate extracellular water deficit (dry mouth, dry tongue, ropy saliva, dry skin and softened eyeballs) developed. This irregularity was rectified and did not appear to alter the improvement of the patient. The success of this regimen was attested to by the steady improvement of renal function followed by prominent diuresis and recovery.

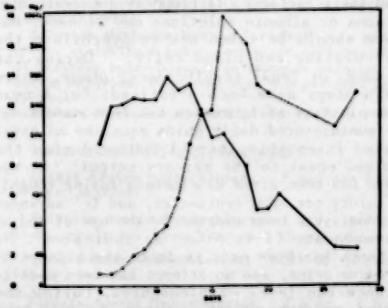


Fig. 4.—Chart showing determinations of sodium chloride in the plasma (represented by the unbroken line, in milligrams per hundred cubic centimeters) and in the urine (represented by the broken line, in grams).

During the diuresis the regimen of water-salt replacement was continued. The peak of the diuresis occurred on the sixteenth day, or later than in the average case (twelve and four-tenths days), as previously noted.[19] Delayed diuresis has been noted in patients with a

salt overload or with prior chronic renal damage. Thus, the chronic pyelonephritis may have accounted for the delayed diuresis. Certainly the combination of two renal complications tends to make for severer renal insufficiency.

On the sixteenth day a transient complication occurred. Sudden and decided gaseous distension developed. An enema and intramuscular injections of pituity ("pitressin") were given. The patient became weak and cyanotic. He was placed in an oxygen tent and given 7.5 grains of aminophylline intravenously. Large amounts of flatus and water were expelled, and improvement was immediate.

After the sixteenth day, with improvement of the appetite, the patient was able to adjust the water-salt intake himself. Recovery from renal insufficiency occurred satisfactorily. As of the time of writing, the patient had been followed up for ten months and was well so far as the renal function was concerned.

COMMENT

Acute renal damage with acute renal insufficiency is an entity which is not uncommonly encountered in a variety of conditions.[18] It is becoming apparent that the high rate of mortality ascribed to this condition in the past resulted mostly from the management. A water, water-salt, or salt intake far exceeding the capacity of the damaged kidneys has been frequently reported.

A high degree of success has been attained even in cases of severe disease with a regimen based on the main changes of the three phases of this syndrome. The first phase is frequently associated with hypotension, and blood transfusions have been given during this period. For hemorrhagic or severely anemic disease multiple transfusions may be required (2 to 4 liters or more, depending on the hemostasis and their factors). If blood is not available, plasma or albumin solutions may be used, but care should be taken not to overdilute the circulating red blood cells.[20] During the second, or renal insufficiency, phase, three main steps have been practiced: (a) A near normal state of hydration has been maintained by administered daily fluids equal to an estimated insensible loss (1,000 cc.) plus the volume equal to the urinary output; (b) the fluid has been given as a formula having roughly 1 calory per cubic centimeter, and (c) advanced acidosis has been averted by the use of sodium bicarbonate (4 to 6 Gm as indicated). No attempt has been made to force the kidneys to produce urine, and no attempt has been made to reduce the level of blood urea. During the third, or diuresis, phase water and salt have been replaced as indicated by the urinary output. The patients have been allowed early to regulate their own dietary and water-salt intake.

With this regimen it has not been necessary to resort to artificial measures, as peritoneal irrigation or in vivo dialysis. The dangers of peritoneal irrigation[19] seem greater than those of this regimen. The ability of the kidneys to recover has been gratifying.

The complication of pyelonephritis in the case herein reported may have delayed the peak of the diuresis to the sixteenth day. Ordinarily there is no prominent avenue for the outward loss of salt, yet hypochloremia and hyponatremia develop. In the present case outward salt loss did occur, and it became necessary to institute active intake of salt during the renal insufficiency. The tendency toward acidosis is constant in this disease. It appears to be worth while to combat more advanced acidosis with a guarded intake of sodium bicarbonate (4 to 6 Gm. as indicated by the plasma bicarbonate concentration).

SUMMARY AND CONCLUSIONS

A case of severe acute renal insufficiency ("lower nephron nephrosis") is presented. Recovery was satisfactory with a regimen based on the main abnormalities of the three phases of this syndrome. Artificial measures for removal of waste products were not instituted and, for the period involved, did not seem indicated.

20. It is preferable not to allow a dilution beyond 50 per cent.

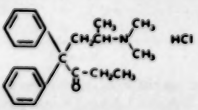
Council on Pharmacy and Chemistry

NEW AND NONOFFICIAL REMEDIES

The following additional articles have been accepted as conforming to the rules of the Council on Pharmacy and Chemistry of the American Medical Association for admission to New and Nonofficial Remedies. A copy of the rules on which the Council bases its action will be sent on application.

AUSTIN SMITH, M.D., *Secretary.*

METHADON HYDROCHLORIDE. Adanon-Winthrop-Stearns.—6-Dimethylamino-4,4-diphenylheptanone-3-hydrochloride.—$C_{21}H_{27}NO \cdot HCl$.—M. W. 345.90. The structural formula may be represented as follows:



Actions and Uses—Methadon hydrochloride possesses, in general, a pharmacologic action similar to that of morphine. It is claimed that methadon causes less nausea and emesis, except when given orally, and less respiratory depression than morphine, with minimal analgesic doses. As a preanesthetic agent methadon is inferior to morphine, since it is not a sedative.

Methadon hydrochloride has definite addiction liability. After its prolonged administration withdrawal symptoms have appeared; however their onset is more gradual, they reach their peak more slowly, and their maximum intensity is less than after similar administration of morphine. Methadon can be substituted for morphine to prevent or alleviate morphine withdrawal symptoms.

Methadon hydrochloride may be used as an analgesic agent for the relief of moderate to severe pain. It is not recommended for conditions in which the sedative effects of morphine and related drugs are of importance. The drug has a satisfactory pertussive action.

Dosage.—Adults, 2.5 to 10 mg. depending on the intensity and nature of the pain. The usual dose is 7.5 mg. orally every three to four hours. For nonproductive cough, 1.25 to 2.5 mg. orally every three hours will usually be satisfactory.

Intramuscular injection is undesirable, but subcutaneous administration in doses of 2.5 to 10 mg. will usually be effective.

Tests and Standards

Methadon hydrochloride occurs as colorless crystals or as a white crystalline powder, odorless and possessing a bitter taste. It is soluble in water, freely soluble in alcohol and in chloroform, practically insoluble in ether and insoluble in glycerin. It is much more soluble in diluted sulfuric acid than in diluted nitric acid, but it is insoluble in diluted hydrochloric acid. It is incompatible with alkaline solutions and with syrup of wild cherry, U.S.P. It is precipitated from solution by the common alkaloidal reagents. The *p*H of a 1 per cent aqueous solution of methadon hydrochloride is between 4.5 and 6.5. It melts at 232-235 C. An aqueous solution of methadon hydrochloride, 30 mg. per 100 cc., exhibits an ultraviolet absorption maximum at 2,920 Angstrom units ($E^{1\%}_{1cm.}$ = 15.6 ± 0.1).

Dissolve about 0.1 Gm. of methadon hydrochloride in 10 cc. of water and add a clear, filtered solution of 0.125 Gm. of picrolonic acid dissolved in 50 cc. of boiling distilled water. Stir the mixture until the yellow precipitate is well formed. Allow the mixture to stand for 2 hours. Filter and recrystallize the residue from diluted alcohol. Filter and dry the residue: the product melts at 160-162 C.

Dissolve about 10 mg. of methadon hydrochloride in 2 cc. of water. Add 2 cc. of methyl orange T.S.: a yellow precipitate forms.

Dissolve about 10 mg. of methadon hydrochloride in 10 cc. of water, add 1 cc. of diluted nitric acid and 1 cc. of silver nitrate T.S.: a white precipitate forms which is soluble in excess ammonia T.S.

Dry about 1 Gm. of methadon hydrochloride, accurately weighed, for 24 hours at 100 C.: the loss in weight does not exceed 0.3 per cent.

Ignite about 0.1 Gm. of methadon hydrochloride, accurately weighed: the residue does not exceed 0.1 per cent.

Transfer about 0.5 Gm. of methadon hydrochloride, accurately weighed, to a 250 cc. flask and dissolve it in 50 cc. of water. Titrate with tenth-normal silver nitrate, using 10 drops of dichlorofluorescein T.S. as the indicator. Each cc. of tenth-normal silver nitrate corresponds to 3.546 mg. of chloride: the amount of chloride found is not less than 10.0 per cent nor more than 10.5 per cent, calculated to the dried substance. Transfer about 0.1 Gm. of methadon hydrochloride, accurately weighed, to a suitable Kjeldahl flask and determine the nitrogen content by the semimicro method (U.S.P. XIII, p. 672): the amount of nitrogen found is not less than 3.95 per cent nor more than 4.15 per cent, calculated to the dried substance.

Dissolve about 0.15 Gm. of methadon hydrochloride, accurately weighed, in 50 cc. of water in a separator. Add 20 cc. of ammonia T.S., and extract the methadon base with four successive portions of 40 cc., 20 cc., 20 cc., and 15 cc. of ether. Combine the ether extracts in a beaker and carefully evaporate the ether on a water bath in a stream of warm air. Dissolve the residue in 15 cc. of neutralized alcohol and titrate the solution with fiftieth-normal hydrochloric acid using methyl red T.S. as the indicator. Near the end of the titration add 50 cc. of water. Each cc. of fiftieth-normal hydrochloric acid is equivalent to 6.92 mg. of methadon base. The amount of methadon base found corresponds to not less than 88.5 per cent nor more than 90 per cent, calculated to the dried substance.

Tablets:

Weigh a counted number of not less than 20 methadon hydrochloride tablets and reduce them to a fine powder without appreciable loss. Weigh, accurately, a portion of the powder, equivalent to 30 mg. of methadon hydrochloride, and transfer it completely to a separator with the aid of 10 cc. of water. Make alkaline with 5 cc. of sodium hydroxide T.S., and mix well. Extract the methadon base with six successive 20 cc. portions of ether, filtering each ether extract through a pledget of cotton previously wetted with ether. Wash the separator and filter with 10 cc. of ether and add the washings to the filtered ether extracts. Wash the combined ether extracts with four 5 cc. portions of water, then extract the combined water extracts with 10 cc. of ether and add this ether extract to main ether extract. Extract the combined ether solution with exactly 20 cc. of hundredth-normal hydrochloric acid, followed by three 10 cc. portions of water. Warm the combined acid and water extracts on a water bath until the odor of ether is no longer perceptible. Cool and titrate the excess acid with hundredth-normal sodium hydroxide, using methyl red T.S. as the indicator. Each cc. of hundredth-normal hydrochloric acid is equivalent to 3.459 mg. of methadon hydrochloride, $C_{21}H_{27}NO{\cdot}HCl$: the amount of methadon hydrochloride found corresponds to not less than 93 per cent nor more than 107 per cent of the labeled amount of methadon hydrochloride.

Syrup, Elixir and Solutions:

Transfer to a separator an accurately measured volume of the syrup, or solution, equivalent to 30 mg. of methadon hydrochloride, and add 10 cc. of water. Follow the extraction procedure as directed in the assay of methadon hydrochloride tablets, beginning with, "Make alkaline with 5 cc. of sodium hydroxide T.S." The amount of methadon hydrochloride found corresponds to not less than 93 per cent nor more than 107 per cent of the labeled amount of methadon hydrochloride.

ABBOTT LABORATORIES, NORTH CHICAGO, ILL.

Solution Methadon Hydrochloride: 10 mg. per cc. 1 cc. ampuls. Each cubic centimeter contains 10 mg. of methadon hydrochloride in isotonic solution with sodium chloride.

Solution Methadon Hydrochloride: 10 mg. per cc. 20 cc. vials. Each cubic centimeter contains 10 mg. of methadon hydrochloride in isotonic solution with sodium chloride. Preserved with 0.9 per cent benzyl alcohol.

Tablets Methadon Hydrochloride: 2.5 mg., 5 mg. and 7.5 mg.

WINTHROP-STEARNS, INC., NEW YORK

Elixir Adanon Hydrochloride: 5 mg. per 5 cc., 473 cc. bottles.

Solution Adanon Hydrochloride: 5 mg. per cc., 2 cc. ampuls and 10 mg. per cc., 20 cc. vials.

Syrup Adanon Hydrochloride: 0.33 mg. per cc., 473 cc. bottles.

Tablets Adanon Hydrochloride: 2.5 mg., 7.5 mg. and 10 mg.

U. S. trademark, 435,101.

ESTRONE—U.S.P. (See New and Nonofficial Remedies 1947, p. 341).

The following additional dosage form has been accepted.

ELI LILLY & COMPANY, INDIANAPOLIS

Aqueous Suspension Estrone: 1 mg., 2 mg., 5 mg. per cc., 1 cc. ampuls.

Council on Physical Medicine

The Council on Physical Medicine has authorized publication of the following reports. HOWARD A. CARTER, *Secretary.*

G-E VARIABLE FREQUENCY WAVE GENERATOR ACCEPTABLE

Manufacturer: General Electric X-Ray Corp., Electromedical Section, 4855 McGeoch Avenue (W), Milwaukee 14, Wisconsin.

The G-E Variable Frequency Wave Generator is a device intended for use in stimulating denervated muscle for the prevention of atrophy. It is housed in a console-type case that can be moved about on casters. The case measures 58 by 53 cm. (23 by 21 inches) and stands 112 cm. (44 in.) high. It weighs 103 Kg. (227 lbs.); the shipping weight is 113 Kg. (250 lbs.). It operates on 110 to 120 volt 60-cycle alternating current, and the maximum power consumption is 525 watts, corresponding to approximately 5 amperes at 110 volts. It is equipped with 1 pair color coded electrode cords; 1 felt disk electrode 38 mm. (1.5 inch) diameter; 1 felt button electrode - 13 mm. (0.5 inch) diameter; 1 electro-diagnostic handle; 1 handle for disk electrodes; 1 ground cord extension - 3 meters (10 feet) long; 1 dispersive electrode - 10 by 15 cm. (4 by 6 in.); 2 dispersive electrodes - 5 by 7.5 cm. (2 by 3 in.); 1 dispersive electrode - 15 by 20 cm. (6 by 8 in.), and 1 dispersive electrode - 20 by 30 cm. (8 by 12 in.).

For direct current the ripple does not exceed 0.15 per cent. The maximum output with 2,000 ohms resistance is 100 milliamperes, which is essential for all therapy or diagnosis utilizing direct current.

For sinusoidal current the deviation from the pure sine wave was plus or minus 2 per cent. The frequency of the sinusoidal current can be varied progressively from a range of 2 to 6,000 cycles per minute or 0.033 to 100 cycles per second.

When the sinusoidal current is used for therapeutic and diagnostic purposes one recommendation is for treatment of denervated or partially denervated muscle. These muscles require a wide range of frequencies for the varying stages of muscle irritability, namely, two cycles per minute to forty cycles per second (2,400 cycles per minute).

The longer the period of degeneration the lower the frequency required to stimulate the muscle with an unmodulated sinusoidal current. Thus, there are muscles that respond maximally to the very low frequencies of two per minute to one per second (60 per minute). This current is a sinusoidal current and hence should be so named. Each electrical cycle may produce two muscular contractions, one contraction for the positive phase, and another contraction for the negative phase.

Some muscles respond maximally to the higher frequencies, namely, from two to forty per second. When the frequency reaches a value of two cycles or more per second the resultant denervated muscle contraction is sustained and tetanic in character. Therefore, it is necessary to modulate this fundamental sinusoidal current in order to secure a graduated muscle contraction. The modulation is secured by means of a double sine wave and is at a rate of two to sixty per minute. This is an adequate range. In the opinion of the Council this form of the current should be termed a modulated sinusoidal current with carrier frequency of 2 to 40 cycles per second.

To stimulate the normal skeletal muscle the complete range of frequencies necessary extends from 40 to 100 cycles per second. At these frequencies the current must be modulated for the same reasons stated before. In the opinion of the Council this current then should be termed a modulated sinusoidal current with carrier frequency of 40 to 100 cycles per second. When and if a sustained tetanic form of contraction is desired, it can be secured by using a frequency of 40 to 100 cycles per second and eliminating the modulation control. This current is not a "Faradic" current, but physiologically it produces the same effects.

For diagnosis the intensity-frequency curve can be secured by plotting frequency on the horizontal axis, and current in milliamperes on the vertical axis. The current recorded is that strength required to secure the minimal muscle contraction at various frequencies.

The lower the frequency required for minimal current values, the greater the degree of degeneration. A muscle responding to a frequency of 15 cycles per second with a minimal current intensity has a better prognosis than one responding to a frequency of one cycle per second. As the muscle improves, there is a shift in the frequency requirement-it moves from a lower to a higher frequency range.

This apparatus is supplied with the following controls and meters:

1. A master switch, which also serves as the line switch, selects alternating or direct current and the proper meter as well as meter scale.
2. Stimulation frequency scales are provided, one graduated to 2 to 120 cycles per minute, the other to 2 to 100 cycles per second. The scale selection is made by means of a scale selector switch.
3. Contraction frequency control is provided with a scale graduated from 2 to 60 cycles per minute and an "On" and "Off" switch.
4. The a-c milliameter is provided with 1.5, 15, and 150 milliampere scales and reads peak values of the alternating current.
5. The d-c milliameter is provided with 20 and 200 milliampere scales.
6. The intensity control has an arbitrary 0 to 100 scale. It regulates the amount of current passing through the patient and incorporates a safety feature which assures that no current can flow to the patient unless the operator first places this control on zero position.

The receptacles into which the electrode cords are inserted are connected to a two prong twist lock plug.

The Council on Physical Medicine voted to include the G-E Variable Frequency Wave Generator in its list of accepted devices.

THE GYNOGRAPH ACCEPTABLE

Manufacturer: Goodman-Kleiner Co., Inc., 5 East 17th Street, New York 3, N. Y.

The Gynograph manufactured by the Goodman-Kleiner Co., Inc., is a device which makes it possible to inject measured volumes of liquid or gas, under controlled pressures into the uterus and uterine tubes; it is designed for use in tubal insufflations with carbon dioxide, in hysterosalpingography, and in viscerographic procedures such as pneumoperitoneum. It is arranged to utilize conveniently the small cartridges in which carbon dioxide is being sold at present. The gas expands into a pressure-reducing chamber, whence it can be led into cannulas or be used to force fluids like iodized oil into the passages connected with the uterus.

The apparatus is easily portable. It weighs less than 4.5 Kg. (10 pounds), and when it is in its case the over-all measurements are 40 by 19 by 18 cm. (15¾ by 7½ by 7 in.).

The Council on Physical Medicine voted to include the Gynograph in its list of accepted devices.

HOSPITAL SERVICE IN THE UNITED STATES

TWENTY-SEVENTH ANNUAL PRESENTATION OF HOSPITAL DATA BY THE COUNCIL ON MEDICAL EDUCATION AND HOSPITALS OF THE AMERICAN MEDICAL ASSOCIATION

F. A. Arestad, M.D., E. H. Leveroos, M.D., W. R. Albus, M.D., and W. W. Corbett, M.D.

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The Annual Report on Hospital Service in the United States is based on census reports submitted by registered hospitals in the United States, Alaska, Guam, Hawaii, Puerto Rico, the Canal Zone and the Virgin Islands. Census blanks are distributed to all registered hospitals annually, and these form the basis for official listings of registered hospitals, hospitals approved for internship and residency training, approved technical schools, as well as for special studies. The reporting period may represent a calendar year or the latest twelve month period for which statistics are available. Compilation and correction of the data continue to date of publication.

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SUMMARY OF HOSPITAL DATA—1947

All Registered Hospitals		General Hospitals	
Number	6,276	Number	4,539
Bed capacity	1,425,222	Bed capacity	592,453
Bassinets	86,378	Bassinets	82,303
Patients admitted	15,829,514	Patients admitted	14,665,195
Births	2,837,139	Births	2,756,959
Average daily census	1,217,229	Average daily census	456,761
Patient days	444,288,585	Patient days	166,717,765

The current report for 1947 contains: (1) the official list of hospitals registered by the American Medical Association in accordance with standards formulated by the Council on Medical Education and Hospitals as adopted by the House of Delegates, including symbols designating those hospitals approved for internship and residency training by the Council on Medical Education and Hospitals, hospitals approved by the American College of Surgeons as meeting unconditionally its minimum requirements for standardization, and hospitals conducting accredited schools of nursing; (2) statistical tables together with textual material covering various aspects of hospital service and related subjects; (3) lists and general information on technical schools approved by the American Medical Association in cooperation with the several agencies concerned, and (4) tables relating to nursing service and education. Information covering approved internships and residencies was published in an earlier issue, (THE JOURNAL, May 1, 1948).

The trend toward increased use of hospital facilities is reflected in tables which follow. Notwithstanding an appreciable drop in total capacity, admissions to registered hospitals increased; this increase occurred largely in the nongovernmental group. A striking increase occurred in the number of hospital births, with a record figure reported. A further trend is seen in the continued reduction in the average hospital stay per patient.

Compilation of the following data is possible only through the cooperation of the hospitals which are represented. For their generous support of this annual survey, the Council on Medical Education and Hospitals wishes to express its gratitude to the Surgeons General of the Army, Navy and United States Public Health Service, to the Air Surgeon and the Administrator of the Federal Security Administration, to the Medical Director of the Veterans Administration and to hospital administrators and others who have assisted in the preparation of this survey.

Scope of Survey

All hospitals registered by the American Medical Association are represented in the 1947 survey; they include civilian hospitals, those under the control of the Army and Navy, United States Public Health Service and other units of the Federal Security Agency, the Veterans Administration, as well as other governmental hospitals. Registration lists cover hospitals in the United States and the possessions; the latter group, however, is not included in the tabular data,

which reflect the status of hospitals within the continental United States. In the registered group, 807 hospitals are approved for internship training and 1,102 for residency training in the specialties; the majority of the hospitals so designated have approval

TABLE A.—*Summary of Growth of Hospitals, 1909 to 1947*

Year	Federal Hospitals		State Hospitals		All Other Hospitals		Total	
	Number	Capacity	Number	Capacity	Number	Capacity	Number	Capacity
1909	71	8,827	232	180,049	4,656	223,189	4,959	421,065
1914	95	12,808	294	232,834	4,650	287,045	5,037	532,681
1918	110	18,815	303	262,254	4,910	331,182	5,323	612,251
1923	220	53,849	601	302,208	6,009	399,615	6,830	755,722
1928	294	61,765	565	269,759	5,583	461,410	6,832	892,934
1931	291	69,170	576	419,892	5,746	485,053	6,613	974,115
1932	301	74,151	568	442,601	5,693	497,622	6,562	1,014,374
1933	295	75,635	557	450,646	5,585	491,765	6,437	1,017,046
1934	313	77,985	544	473,035	5,477	497,201	6,334	1,048,101
1935	316	83,353	526	483,894	5,404	507,792	6,246	1,075,139
1936	323	84,234	504	503,326	5,342	509,161	6,169	1,096,721
1937	329	97,951	522	506,913	5,277	517,684	6,128	1,124,548
1938	330	92,346	523	541,279	5,313	527,853	6,166	1,161,380
1939	329	96,338	523	560,575	5,374	538,113	6,226	1,195,026
1940	336	108,928	521	572,079	5,434	545,238	6,291	1,226,245
1941	428	179,202	530	600,320	5,400	544,830	6,358	1,324,351
1942	474	220,958	530	606,437	5,341	556,452	6,345	1,383,827
1943	527	476,673	531	616,115	5,297	562,466	6,355	1,649,254
1944	708	551,135	539	609,025	5,274	569,785	6,611	1,729,945
1945	705	546,384	549	619,642	5,257	571,918	6,511	1,738,944
1946	604	264,486	557	628,363	5,259	575,865	6,290	1,468,714
1947	401	213,304	563	626,648	5,312	585,370	6,276	1,425,322

TABLE B.—*Number of Hospitals According to Size*

Bed Capacity	General Hospitals	Nervous and Mental	Tuberculosis	Other Hospitals	Total Number
Below 25	989	30	25	142	1,185
26-50	1,093	85	78	205	1,451
51-100	977	71	125	182	1,355
101-200	788	46	94	110	1,038
201-300	322	31	47	44	444
Over 300	381	322	72	29	803
Totals	4,539	585	441	711	6,276

for both types of graduate training. A total of 2,609 hospitals appearing in the official list are accredited by the American College of Surgeons as meeting unconditionally its minimum requirements for standardization. Since changes and corrections are made in the official list of registration up to the date of publication, totals taken directly from this source may vary slightly from those presented in the tables.

Number, Size and Classification of Hospitals

The number of registered hospitals, as compared with the previous year's report, remained about constant, with 6,280 registered in 1946 and 6,276 in 1947. There was a decrease of 45 hospitals in the governmental group, largely due to the continued drop in the number of federal hospitals reported. This loss was offset by a gain of 41 hospitals in the nongovernmental groups, representing increases in the nonprofit association hospitals and those controlled by corporations (profit unrestricted). While the federal hospitals continued to decrease in number, the decrease was relatively small as compared with the previous year's drop, when 241 less hospitals were reported. A summary of the changes in the number of registered hospitals and their bed capacities is found in table A, accompanying this text.

Table B gives a breakdown of registered hospitals on the basis of bed capacity. Relatively few changes occurred during the current period, as might have been expected in view of the relative constancy of the number registered. Hospitals of 100 bed capacity and under showed an increase from 3,969 to 3,991. Hospitals from 101 beds to 300 increased from 1,471 to 1,482, while hospitals of 301 bed capacity and over fell from 840 in 1946 to 803 in 1947; 34 of this 37 decrease, was in the general hospital class. Tables C and D present summaries of hospital service from the standpoint of type of control and type of service primarily rendered. Governmental hospitals are classified on the basis of the political unit exercising control; nongovernmental are subdivided on the basis of incorporation as nonprofit or proprietary organizations.

Governmental hospitals declined in number from 1,962 to 1,917. This decrease occurred principally in the federally controlled group, which numbered 464

TABLE C.—*Summary of Hospital Service Classified by Control*

	Hospitals	Beds	Average Census	Bassinets	Births	Admissions
Governmental						
Federal	401	213,304	168,133	2,444	44,081	1,295,128
State	563	626,648	585,747	1,932	51,700	737,402
County	526	101,402	89,568	4,352	119,929	784,699
City	369	79,184	69,490	5,008	191,576	1,209,548
City-county	58	10,767	7,657	1,028	22,666	188,771
Total governmental	1,917	1,030,305	904,603	15,724	441,502	4,204,344
Nongovernmental						
Church	1,651	141,999	118,780	27,145	969,653	4,594,859
Nonprofit associations	1,965	202,601	158,835	34,110	1,153,863	5,628,649
Total nonprofit	3,616	344,581	277,615	61,255	2,123,516	10,177,508
Individual and partnership	984	29,325	18,303	6,137	166,363	948,089
Corporations (profit unrestricted)	359	22,111	16,706	3,292	165,678	850,380
Total proprietary	1,343	50,436	35,011	9,389	272,041	1,447,469
Total nongovernmental	4,959	395,017	312,626	70,634	2,395,557	11,625,170
Total all hospitals	6,276	1,425,322	1,217,229	86,378	2,837,139	15,829,514

TABLE D.—*Summary of Hospital Data According to Type of Service*

	Hospitals	Beds	Average Census	Bassinets	Births	Admissions
General	4,539	592,453	456,761	82,303	2,756,959	14,665,195
N & M	585	680,913	651,579	250	3,662	291,554
Tuberculosis	441	81,326	62,575	32	176	10,080
Maternity	100	5,442	3,929	3,312	76,679	160,382
Industrial	33	2,914	1,849	.....	.....	57,110
E. E. N. T.	44	2,534	1,553	15	6	116,563
Children's	41	4,630	3,277	80	.....	160,923
Orthopedic	92	6,519	4,758	23	.....	20,124
Isolation	65	12,556	5,479	183	74	152,300
Conv. and rest.	93	5,849	4,366	20	.....	22,259
Institutions	194	22,516	14,759	151	163	149,276
All other hospitals	59	7,577	6,526	9	.....	24,269
Total all hospitals	6,276	1,425,322	1,217,229	86,378	2,837,139	15,829,514

hospitals in the previous report and 401 in 1947; the city-county category also showed a decline, from 64 to 58. Total nonprofit hospitals increased by 24 during the reporting period and proprietary hospitals by 17, raising the total of nongovernmental units to 4,359, a gain of less than 1 per cent.

Little variation from last year's figures is observed in comparing the data based on type of service rendered.

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Neuropsychiatric hospitals increased from 575 to 585, while tuberculosis sanatoriums decreased by about the same number, from 450 in 1946 to 441 in 1947. General hospitals showed a gain of 18 over the previous report, perhaps fewer than would be anticipated. When the decrease in the number of federal hospitals is considered, however, this apparently slight increase appears more significant. General hospitals account for 70 per cent of all hospitals registered, neuropsychiatric for slightly over 9 per cent, tuberculosis sanatoriums for 7 per cent, and the remaining number is made up of several categories including maternal, industrial, eye, ear, nose and throat, children's, orthopedic, isolation, convalescent and rest, institutions, and an inclusive classification, "all other hospitals." The official list classifies those registered as hospitals and sanatoriums, and related institutions.

Bed Capacity

Comparative Totals
1946: 1,468,714
1947: 1,425,222

From the high point of 1,738,944 beds reported in 1945, the bed capacity in registered hospitals has declined to its present level of 1,425,222 beds, representing a further decline of 52,529 beds in the governmental group, primarily federal hospitals, and an increase of 9,037 in the nongovernmental category. This compares with a loss of 273,984 beds in governmental

TABLE E.—*Governmental and Nongovernmental Hospital Service*

	Hospitals	Beds	Average Census	Bassinets	Births	Admissions
Governmental						
General	989	257,884	191,676	14,773	429,658	3,560,422
N & M	371	602,452	635,702	186	1,332	717,500
Tuberculosis	315	70,841	53,102	31	173	63,302
Special	109	19,223	10,325	614	10,256	201,653
Institutions	156	20,566	13,506	180	163	122,307
Total governmental	1,917	1,020,965	904,603	15,784	441,582	4,304,344
Nongovernmental						
General	3,570	334,569	265,085	67,539	2,227,201	11,084,773
N & M	214	18,461	15,976	73	1,750	74,504
Tuberculosis	126	11,287	9,473	1	3	15,778
Special	411	29,699	21,051	3,819	66,308	131,556
Institutions	38	2,011	1,141	31	.....	18,069
Total nongovernmental	4,359	395,017	312,626	70,654	2,295,357	11,325,170
Total all hospitals	6,276	1,425,222	1,217,229	86,378	2,837,139	15,929,514

hospitals, reported last year and a gain in nongovernmental hospitals of 3,754 beds for the same period. With federal hospitals as a whole reporting the decrease noted, the bed capacities of hospitals under Veterans Administration control gained slightly, with 102,235 beds reported as of July 13, 1948. City hospitals showed an increase of 1,650 beds; state, county and city-county institutions, on the other hand, indicated small decreases in their capacities. On the basis of currently available statistics, governmental hospitals now control 72.3 per cent of all hospital beds and the nongovernmental group 27.7 per cent; this compares with 73.7 and 26.3 in 1946 and 78 per cent and 22 per cent in 1945. It should be noted that 626,648 of the 1,030,205 beds under governmental control are located in state hospitals, largely of special types.

The bed capacity of general hospitals continued to decline, with 641,331 beds reported in 1946 and 592,453 the past year. This decrease, however, should be interpreted in the light of the increase of beds in the nongovernmental group; these latter rose from a figure of 324,211 for 1946 to 334,569 in 1947. General hospitals now represent 41.6 per cent of all beds, neuropsychiatric hospitals 47.9 per cent, tuberculosis sanatoriums 5.8 per cent and other institutions 4.7 per cent. There

TABLE F.—*Summary of Hospital Service in the United States According to Type of Service and Agencies Concerned from the 1947 Census of Hospitals Registered by the American Medical Association*

Type	Hospitals	Beds	Average Census	Bassinets	Births	Admissions
U. S. Totals	6,276	1,425,222	1,217,229	86,378	2,837,139	15,929,514
Federal						
Totals	491	213,204	168,133	2,444	46,081	1,285,128
General	317	132,256	96,794	2,427	46,048	1,179,589
N & M	36	69,667	62,638	.....	10	53,215
TB	23	8,858	7,112	.....	4	20,430
Special	4	1,740	858	9	1	18,736
Institutions	21	2,221	1,231	8	18	13,179
State						
Totals	503	626,648	585,747	1,922	31,700	237,402
General	57	21,599	15,484	1,542	30,134	150,899
N & M	281	502,678	542,024	169	1,219	151,554
TB	79	26,184	18,995	1	33	22,972
Special	38	7,816	4,468	118	149	122,154
Institutions	108	8,371	4,178	102	145	86,823
County						
Totals	526	161,402	92,568	4,332	119,620	784,490
General	267	43,904	32,602	3,504	109,332	717,921
N & M	49	96,806	25,926	10	83	10,714
TB	176	22,929	17,788	16	111	22,947
Special	20	3,702	2,004	422	10,094	19,455
Institutions	14	4,268	3,528	.....	.....	13,461
City						
Totals	309	78,184	60,498	5,968	191,576	1,208,546
General	286	51,736	41,278	5,807	191,539	1,144,612
N & M	5	4,879	4,514	7	.....	1,877
TB	25	10,155	7,706	14	25	15,651
Special	41	5,804	2,254	40	12	46,566
Institutions	12	5,610	4,646	10	.....	8,439
City-County						
Totals	58	10,767	7,657	1,098	32,005	188,771
General	42	8,297	5,958	1,003	32,005	184,429
N & M	..	.....	.....	.....	.....	.....
TB	12	2,215	1,508	.....	.....	1,916
Special	3	220	191	25	.....	2,122
Institutions	1	35	15	.....	.....	304
Church						
Totals	1,051	141,980	118,780	27,145	989,653	4,324,859
General	924	120,653	100,849	25,944	946,158	4,454,707
N & M	19	3,349	2,979	.....	.....	6,467
TB	20	2,469	2,147	.....	2	3,461
Special	87	5,660	4,105	1,200	23,493	60,879
Institutions	1	18	1	1	.....	85
Nonprofit						
Totals	1,965	392,661	158,835	34,110	1,153,863	5,652,649
General	1,578	167,390	121,646	32,553	118,280	5,597,145
N & M	38	6,301	5,356	52	1,560	21,500
TB	77	7,229	5,979	1	1	9,622
Special	215	19,548	14,675	1,474	33,993	706,298
Institutions	57	1,993	1,140	30	.....	17,984
Individual and Partnership						
Totals	984	98,225	18,302	6,137	166,363	648,692
General	807	91,505	12,857	5,813	157,333	784,940
N & M	87	4,136	3,449	7	161	22,662
TB	30	850	676	9	64	1,734
Special	70	1,834	1,221	308	6,805	38,726
Institutions	..	.....	.....	.....	.....	.....
Corporations						
Totals	359	92,111	16,708	3,202	105,679	980,540
General	300	14,908	10,880	3,212	105,668	547,538
N & M	70	4,955	4,192	14	.....	25,988
TB	10	831	686	.....	.....	1,253
Special	19	1,327	950	36	212	36,923
Institutions	..	.....	.....	.....	.....	.....

was an appreciable gain in the number of neuropsychiatric beds during the period, from 674,930 to 680,913; this amounts to only about one third the gain shown in these hospitals during the 1945-1946 period, however. A condensation of data presented above is found in table E, Governmental and Nongovernmental

TABLE 1.—HOSPITAL FACILITIES BY STATES AND BY CONTROL: A. GOVERNMENT HOSPITALS

Marginal No.		Federal					State					County					City					City-County					Total Governmental					Marginal No.
		Hospitals	Beds	Bassinets	Patients Admitted	Average Census	Hospitals	Beds	Bassinets	Patients Admitted	Average Census	Hospitals	Beds	Bassinets	Patients Admitted	Average Census	Hospitals	Beds	Bassinets	Patients Admitted	Average Census	Hospitals	Beds	Bassinets	Patients Admitted	Average Census	Hospitals	Beds	Bassinets	Patients Admitted	Average Census	
1	Alabama	7	4,010	55	19,198	3,218	9	8,357	91	44,399	7,496	6	331	34	3,744	280	4	291	66	10,342	129	7	765	154	31,287	511	33	13,754	380	109,970	11,743	1
2	Arizona	19	2,065	75	21,035	1,502	3	1,490	..	941	1,393	7	525	57	7,787	325	1	15	3	363	4	..	..	..	..	..	30	4,115	137	30,126	3,220	2
3	Arkansas	4	3,375	10	30,304	2,020	4	6,296	20	7,895	6,148	1	215	....	923	184	4	292	61	11,060	192	..	..	..	..	..	13	10,178	81	39,501	9,274	3
4	California	34	18,6 6	332	162,645	14,790	18	33,257	36	32,525	30,109	58	19,097	755	199,864	15,865	9	1,509	265	51,377	1,129	2	122	15	3,105	86	117	73,628	1,217	421,742	62,800	4
5	Colorado	7	12,007	98	50,167	14,241	8	6,096	25	6,873	5,691	7	297	65	9,698	194	4	705	8	5,118	501	..	..	..	..	..	24	19,738	171	80,142	20,543	5
6	Connecticut	3	434	....	6,348	347	15	13,078	10	6,915	12,080	..	....	....	....	....	..	....	....	....	....	..	....	....	....	....	18	13,512	10	13,263	12,427	6
7	Delaware	1	150	....	1,758	148	5	2,323	7	813	2,233	..	....	....	....	....	..	....	....	....	....	..	....	....	....	....	6	2,483	7	2,571	2,381	7
8	District of Columbia	7	10,372	105	29,990	9,186	..	....	....	....	....	..	....	....	....	....	..	....	....	....	....	..	....	....	....	....	12	13,251	240	53,206	11,438	8
9	Florida	16	3,297	187	48,613	2,005	9	7,849	19	9,650	7,183	8	1,630	97	16,964	625	11	1,509	265	51,377	1,129	2	122	15	3,105	86	40	22,605	566	153,865	18,154	10
10	Georgia	10	6,409	72	38,811	5,397	6	13,082	20	20,633	10,739	10	495	107	10,041	375	7	1,615	231	50,780	1,188	7	634	136	23,630	445	30	15,795	494	105,264	16,911	11
11	Idaho	1	203	....	2,512	191	4	1,878	..	396	1,747	4	214	69	7,494	174	1	25	7	637	14	..	..	..	..	..	10	2,380	76	11,039	2,126	12
12	Illinois	11	12,363	50	54,046	8,831	20	40,312	58	31,105	38,097	26	7,748	308	78,578	6,065	23	3,422	298	44,073	2,434	..	..	..	..	..	65	71,827	600	111,342	19,850	13
13	Indiana	4	2,870	....	16,249	2,332	14	15,117	62	13,484	14,258	39	2,917	401	65,907	2,365	5	917	77	21,202	604	..	..	..	..	..	58	18,904	540	101,358	19,187	14
14	Iowa	3	2,339	....	6,350	2,112	14	11,708	60	24,428	11,317	8	559	44	7,905	370	10	345	106	12,880	276	..	..	..	..	..	35	14,952	210	45,583	13,806	15
15	Kansas	11	3,967	27	25,839	2,418	11	8,360	31	12,918	7,438	6	335	65	9,114	297	10	365	107	13,474	272	..	..	..	..	..	32	15,673	203	60,824	12,526	16
16	Kentucky	8	5,387	59	29,128	3,771	10	8,742	22	8,208	7,592	5	282	24	3,734	244	5	312	76	12,379	212	4	1,059	79	15,315	707	19	15,821	359	105,149	12,831	17
17	Louisiana	7	2,608	28	19,574	1,763	11	13,113	231	83,258	11,034	..	....	....	....	....	..	100	..	34	..	..	..	....	....	....	....	18	5,635	36	9,348	5,025	18
18	Maine	2	1,014	....	5,210	797	6	4,383	2	1,453	4,098	3	176	48	5,836	132	3	236	34	2,685	139	..	..	..	..	..	28	18,797	362	78,629	16,301	19
19	Maryland	3	3,874	98	41,255	4,333	27	54,260	54	15,154	52,222	8	1,554	....	1,190	850	26	6,231	530	89,497	4,459	1	35	..	304	15	72	68,080	632	158,540	62,378	20
20	Massachusetts	10	6,039	52	29,085	4,992	21	24,964	61	32,243	21,764	29	12,079	119	24,265	9,307	39	5,092	661	127,976	4,151	..	....	....	....	....	96	48,999	872	190,542	42,806	21
21	Michigan	7	6,876	31	39,038	5,674	21	24,964	61	32,243	21,764	29	12,079	119	24,265	9,307	39	5,092	661	127,976	4,151	..	....	....	....	....	69	22,626	441	79,449	20,376	22
22	Minnesota	8	2,747	26	11,594	2,347	17	15,822	44	13,979	15,050	16	1,663	28	5,871	1,536	14	1,287	217	36,636	1,156	4	1,012	72	9,769	647	39	8,675	195	55,932	7,684	23
23	Mississippi	3	2,451	25	14,952	1,891	12	5,940	60	26,623	5,578	3	138	35	5,283	70	3	92	26	2,956	41	2	164	45	5,686	98	42	23,478	402	94,854	22,094	24
24	Missouri	3	3,676	3	17,765	2,365	13	12,471	23	10,018	11,451	6	560	75	9,757	358	..	....	....	....	....	1	25	..	158	11	12	7,673	43	8,060	7,355	25
25	Montana	6	493	27	7,316	290	2	2,100	..	433	2,069	3	255	16	702	165	..	....	....	....	....	..	....	....	....	....	18	7,576	88	17,118	7,031	26
26	Nebraska	4	695	21	6,045	360	9	6,405	27	5,441	6,297	3	419	26	4,814	341	2	57	14	1,414	43	..	....	....	....	....	9	888	71	10,705	730	27
27	Nevada	4	109	30	2,671	90	1	375	..	157	359	4	494	51	7,997	297	..	....	....	....	....	..	....	....	....	....	10	3,822	67	8,029	3,488	28
28	New Hampshire	2	150	10	1,749	107	3	3,335	..	1,657	3,308	4	297	42	1,980	101	2	130	15	3,243	72	..	....	....	....	....	31	38,537	507	111,954	34,699	29
29	New Jersey	5	7,450	51	43,708	6,395	15	17,384	5	7,442	16,905	22	10,668	287	29,343	8,820	9	3,255	64	28,431	2,069	..	....	....	....	....	19	2,756	81	16,885	2,178	30
30	New Mexico	13	1,321	51	11,675	994	3	1,385	10	2,102	1,211	..	....	....	....	....	..	56	20	1,243	43	..	....	....	....	....	154	149,137	1,449	454,478	135,931	31
31	New York	24	15,167	118	80,925	12,128	47	104,616	83	34,699	99,678	55	6,416	179	90,593	4,921	48	22,938	1,049	302,346	19,500	..	....	....	....	....	42	17,838	342	84,008	13,882	32
32	North Carolina	6	3,414	77	24,460	3,004	17	10,571	5	15,093	9,876	17	1,185	149	23,035	872	3	444	77	11,852	255	4	284	43	4,083	178	42	12,917	46	39,128	12,132	33
33	North Dakota	2	140	25	5,156	256	3	3,488	..	618	3,221	1	40	3	247	18	3	49	18	1,958	41	..	....	....	....	....	29	44,659	335	119,134	39,068	34
34	Ohio	7	4,881	1	29,018	4,322	26	32,650	36	30,633	28,990	27	3,810	160	59,749	2,190	19	3,292	184	71,743	2,570	..	....	....	....	....	43	12,308	358	65,785	11,960	35
35	Oklahoma	15	1,658	104	21,091	1,650	14	10,039	74	21,046	10,252	3	126	23	4,259	71	12	500	157	19,439	317	..	....	....	....	....	32	12,323	358	44,796	12,240	36
36	Oregon	6	1,581	22	12,258	1,744	9	6,785	39	10,347	5,832	4	184	30	5,748	145	3	175	15	2,959	51	..	....	....	....	....	22	8,025	97	31,332	7,774	37
37	Pennsylvania	10	8,301	49	46,361	7,541	42	47,387	207	53,942	44,718	15	4,622	8	4,330	3,925	8	4,431	87	90,392	2,695	1	56	..	77	34	76	65,057	342	134,092	59,049	38
38	Rhode Island	2	1,000	14	9,086	667	4	5,624	24	1,719	4,949	..	....	....	....	....	3	531	66	17,170	425	..	31	11	856	11	7	6,655	80	18,256	5,761	39
39	South Carolina	5	1,900	38	22,691	1,255	4	5,762	41	8,305	5,430	14	1,474	241	40,361	1,137	3	72	24	2,774	55	..	....	....	....	....	17	4,276	74	11,578	3,733	40
40	South Dakota	10	1,209	50	7,911	1,145	4	2,855	..	1,155	2,693	..	....	....	....	....	4	1,075	144	35,6 0	874	4	180	110	15,761	775	38	18,038	371	115,032	15,397	41
41	Tennessee	11	6,097	71	44,858	5,166	12	7,705	..	12,840	7,139	7	2,781	46	3,921	1,756	4	1,075	144	35,6 0	874	4	180	110	15,761	775	38	18,038	371	115,032	15,397	41
42	Texas	23	12,053	154	87,041	9,552	21	19,815	24	36,483	18,804	25	1,465	261	40,458	954	10	995	152	25,611	473	14	2,295	217	42,580	1,620	93	36,824	1,142	144,912	30,583	42
43	Utah	2	234	6	3,367	179	3	1,690	..	692	1,864	4	312	34	5,351	189	5	138	60	5,084	85	..	....	....	....	....	14	2,580	126	14,804	2,315	43
44	Vermont	1	250	..	3,672	198	3	1,642	..	1,208	1,266	..	....	....	....	....	..	....	....	....	....	..	....	....	....	....	6	1,892	....	4,400	1,786	44
45	Virginia	14	8,272	129	63,392	5,349	15	13,728	161	30,108	13,538	2	56	15	2,272	39	6	1,092	69	8,414	810	1	31	10	900	16	38	21,169	364	113,086	19,243	45
46	Washington	14	7,273	111	53,145	4,926	7	8,998	2	4,230	8,313	17	2,195	155	27,373	1 707	1	80	..	40	11	..	....	....	....	....	39	18,578	298	84,758	14,970	46
47	West Virginia	3	1,079	8	6,235	713	13	6,497	27	11,559	5,791	3	192	29	4,873	137	3	253	63	12,151	302	..	....	....	....	....	19	7,929	127	28,738	6,947	47
48	Wisconsin	6	2,250	18	9,873	2,170	10	5,571	39	15,727	5,761	60	15,047	81	29,673	7,930	13	748	125	18,259	429	..	....	....	....	....	89	24,546	273	73,832	21,713	48
49	Wyoming	4	1,565	17	6,014	934	4	1,317	17	4,741	1,067	5	434	90	13,866	337	..	....	....	....	....	..	....	....	....	....	13	3,176	124	26,561	2,338	49
	Totals (1947)	401	213,304	2,444	1,285,126	168,133	563	626,648	1,932	737,402	585,747	326	131,428	4,352	784,499	82,368	209	76,184	5,908	1,258,226	60,498	58	10,707	1,028	188,771	7,647	1,917	1,030,205	15,724	4,294,344	904,043	
	(1946)	404	201,406	2,662	1,249,711	213,346	557	678,503	1,876	648,338	579,782	514	102,071	4,315	704,772	79,758	205	76,334	5,836	1,209,573	57,283	64	11,240	1,060	185,569	7,961	1,902	1,087,734	15,728	4,538,163	951,282	
	(1945)	705	246,284	3,923	4,047,940	231,525	549	619,642	1,746	559,332	580,783	508	102,121	4,274	674,488	77,510	209	79,067	5,491	966,423	57,417	56	9,887	757	183,121	6,504	2,267	1,352,278	15,289	6,345,229	1,016,183	
	(1944)	788	251,135	3,402	4,287,271	270,873	531	600,205	1,650	550,254	549,441	494	97,541	3,940	671,281	77,956	354	77,879	5,215	942,658	57,848	61	11,321	842	162,658	7,772	2,284	1,216,139	13,859	6,262,827	985,732	
	(1943)	827	476,673	2,356	4,021,977	308,746	510	610,115	1,623	543,258	571,556	511	100,151	3,763	581,706	77,789	334	77,579	5,215	942,658	57,848	61	10,115	643	130,395	7,157	1,924	1,015,781	11,629	5,702,135	852,638	
	(1942)	474	220,938	1,206	1,675,722	147,094	530	616,437	1,618	601,481	566,457	505	98,997	3,512	606,390	76,948	334	79,235	4,847	999,687	60,982	57	10,955	1,009	177,984	7,960	1,864	965,511	11,494	3,602,602	831,502	
	(1941)	426	179,592	1,008	1,208,112	118,460	530	630,230	1,572	620,251	561,630	512	98,227	3,228	645,749	83,214	337	78,990	5,045	999,559	61,019	57	10,955	1,009	177,984	7,960	1,767	873,089	10,559	3,602,602	784,672	
	(1940)	336	108,928	1,089	931,137	86,034	521	572,879	1,247	564,733	520,264	501	100,9.6	2,748	589,280	86,177	329	77,231	4,210	951,295	61,705	67	10,026	949	157,396	7,513	1,740	845,146	9,604	2,734,375	764,048	
	(1939)	329	96,238	923	477,417	80,697	520	560,353	1,234	488,907	521,490	490	96,621	2,561	552,095	80,262	317	75,189	4,089	928,924	61,008	68	9,408	842	130,702	7,110	1,728	813,139	9,111	2,607,280	709,057	
	(1938)	340	92,248	772	445,891	75,470	523	541,279	1,127	549,037	512,439	490	96,621	2,561	552,095	80,262	317	75,189	4,089	928,924	61,008	68	9,408	842	130,702	7,110	1,723	788,749	9,277	2,509,925	718,880	
	(1937)	329	97,951	734	439,460	80,819	522	508,913	1,111	511,803	485,891	484	93,379	2,641	549,352	80,375	324	79,208	3,967	985,656	65,308	61	9,999	496	108,873	7,359	1,724	763,840	8,642	2,452,859	696,855	
	(1936)	323	94,234	675	436,570	68,732	524	503,396	1,136	534,654	478,178	484	87,541	2,388	497,706	76,277	322	78,900	3,947	985,656	65,308	61	10,139	510	111,398	8,025	1,724	741,712	8,417	2,293,052	674,921	
	(1935)	316	83,353	604	387,990	64,756	526	481,994	1,180	513,545	462,670	496	83,919	2,404	456,425	71,157	328	71,911	3,640	792,887	59,891	68	11,128	548	113,600	8,729	1,749	717,888	8,346	2,159,065	645,990	
	(1934)	313	77,865	560	324,354	58,309	544	473,005	1,154	454,599	447,014	496	80,410	2,230	406,921	69,047	344	69,639	3,627	767,643	57,865	69	9,143	341	172,696	6,929	1,776	694,473	7,813	2,155,538	636,074	
	(1933)	295	75,615	502	324,160	56,726	557	459,646	925	434,160	435,527	511	80,410	2,230	406,921	69,047	343	69,639	3,627	767,643	57,865	63	8,339	340	166,812	6,281	1,864	679,307	7,600	2,049,533	610,168	
	(1932)	301	74,151	461	320,628	57,984	568	442,691	1,014	404,132	417,232	514	84,334	2,116	384,263	71,099	329	69,351	3,529	767,096	57,387	63	8,339	340	166,812	6,281	1,816	641,524	7,202	1,831,078	589,301	
	(1931)	291	68,170	391	301,149	52,881	576	419,282	846	386,984	404,938	508	77,273	1,982	345,236	62,862	304	61,351	3,478	680,529	46,854	77	14,348	615	168,450	11,766	1,816	641,524	7,202	1,831,078	589,301	

Hospital Service. Table F presents a complete statistical analysis from the standpoint of type of service and the agencies concerned, of the number of registered hospitals, their bed capacity, average daily census, number of bassinets and births, with total admissions to these hospitals.

Number of Patients Admitted

Comparative Totals
1948: 15,153,452
1947: 15,829,514

The trend toward increased use of hospital facilities is seen in the greater number of admissions to registered hospitals reported for 1947. Notwithstanding an appreciable drop in the bed capacity, 4.4 per cent more patients were admitted than during the 1946 period. If non-governmental hospitals alone are considered, the increase is over 10 per cent. Excluding the federal hospitals, all other groups showed an increase in their rate. Admissions to nonprofit organization hospitals rose from 9,198,159 to 10,177,508, an increase of 979,349 patients; this category now accounts for 64.3 per cent of the total number of admissions. The federal hospitals reported a decrease of 664,585 in their admissions; neuropsychiatric hospitals and tuberculosis sanatoriums in the federal group, however, indicated 3 per cent and 22 per cent increases. Governmental hospitals, with 72.3 per cent of the bed capacity, had 4,204,344 admissions, or 26.5 per cent of the total; the nongovernmental hospitals, with 27.7 per cent of the beds, had 11,625,170 admissions, or 73.5 per cent. The

TABLE 1.—HOSPITAL FACILITIES BY STATES AND BY CONTROL: B. NONPROFIT ORGANIZATIONS

Marginal No.		Church Related (Nonprofit)					Nonprofit Associations					Total Nonprofit					Marginal No.
		Hospitals	Beds	Bassinets	Patients Admitted	Average Census	Hospitals	Beds	Bassinets	Patients Admitted	Average Census	Hospitals	Beds	Bassinets	Patients Admitted	Average Census	
1	Alabama	11	1,113	231	30,492	857	16	1,415	185	33,692	1,035	27	2,528	416	64,184	1,872	1
2	Arizona	8	1,125	162	32,452	852	10	674	129	18,991	662	24	1,949	291	51,343	1,604	2
3	Arkansas	12	1,196	243	36,210	1,038	14	800	156	23,569	526	26	2,086	379	74,579	1,564	3
4	California	52	7,288	1,559	273,809	6,243	77	8,413	1,281	274,414	6,809	129	15,701	2,840	548,223	13,083	4
5	Colorado	29	2,790	508	95,679	2,329	24	2,247	129	29,123	1,497	53	5,046	637	124,302	3,826	5
6	Connecticut	7	1,450	350	51,780	1,491	39	6,654	972	150,789	4,779	46	7,904	1,322	211,579	6,175	6
7	Delaware	1	100	22	2,919	71	8	1,131	200	27,935	792	9	1,236	222	30,854	863	7
8	District of Columbia	4	884	167	34,834	712	10	1,809	384	80,738	1,461	14	2,783	551	115,572	2,173	8
9	Florida	9	1,218	293	41,537	906	37	2,295	409	61,949	1,544	46	3,513	702	103,486	2,440	9
10	Georgia	8	835	158	29,131	644	24	2,127	377	60,334	1,647	32	2,962	535	89,465	2,291	10
11	Idaho	12	992	222	33,276	730	6	157	36	5,668	92	18	1,039	258	38,944	822	11
12	Illinois	92	14,245	2,357	429,307	12,170	100	11,776	2,085	327,742	8,592	192	25,521	4,502	757,049	21,162	12
13	Indiana	29	5,181	1,061	171,937	4,331	20	1,663	357	56,080	1,322	49	6,844	1,398	228,017	5,653	13
14	Iowa	42	5,059	941	158,636	4,227	23	1,225	315	44,522	1,046	65	6,284	1,256	203,158	5,273	14
15	Kansas	39	3,706	797	118,314	3,141	39	1,301	239	34,832	838	63	4,967	1,036	153,143	3,980	15
16	Kentucky	16	2,192	417	76,554	1,871	32	2,061	350	59,317	1,482	48	4,253	756	136,071	3,353	16
17	Louisiana	11	1,832	358	62,560	1,561	23	1,877	249	53,660	1,240	34	3,709	607	135,650	2,803	17
18	Maine	7	551	101	16,325	427	31	1,974	401	55,145	1,508	38	2,525	502	71,470	1,935	18
19	Maryland	9	1,991	262	45,712	1,265	31	4,888	630	107,887	3,041	40	6,719	892	153,599	4,306	19
20	Massachusetts	36	3,742	823	79,907	2,111	111	11,833	2,060	365,387	9,947	147	15,576	2,883	445,294	12,058	20
21	Michigan	35	5,950	1,285	181,617	4,274	95	8,830	1,533	245,182	6,749	130	14,110	2,818	426,799	11,014	21
22	Minnesota	39	4,473	815	155,030	3,944	72	4,276	852	131,053	3,418	111	8,749	1,667	284,112	7,362	22
23	Mississippi	5	496	97	34,578	443	38	1,545	362	62,626	1,657	43	2,041	459	97,204	1,500	23
24	Missouri	20	6,822	1,137	192,728	5,305	35	2,966	474	70,732	2,278	74	9,815	1,611	263,472	8,172	24
25	Montana	25	2,054	441	65,166	1,624	9	362	54	10,750	778	34	2,416	500	75,876	1,902	25
26	Nebraska	30	2,785	570	90,686	2,301	12	643	146	23,860	503	42	3,428	716	113,573	3,004	26
27	Nevada	2	132	32	5,148	96	1	40	7	670	15	3	172	39	5,818	111	27
28	New Hampshire	4	461	76	14,455	364	24	1,329	246	45,361	1,119	28	1,790	322	59,816	1,483	28
29	New Jersey	17	3,530	598	90,017	2,855	79	9,405	1,561	245,259	6,983	96	12,934	2,159	340,302	9,798	29
30	New Mexico	14	946	176	27,322	677	8	401	46	8,236	207	22	1,347	222	35,558	884	30
31	New York	75	12,247	2,602	270,654	9,904	220	35,578	4,592	839,619	28,490	295	47,825	6,594	1,110,273	38,394	31
32	North Carolina	14	1,394	305	45,531	1,171	85	6,767	1,254	247,354	5,162	99	8,161	1,559	292,885	6,333	32
33	North Dakota	25	1,966	410	70,264	1,667	7	264	52	6,762	278	32	2,247	462	77,026	1,945	33
34	Ohio	46	8,067	1,479	278,172	7,185	96	9,871	1,843	333,612	8,179	142	17,940	3,313	611,784	15,514	34
35	Oklahoma	12	1,565	313	51,943	1,091	11	926	174	29,662	538	23	2,291	437	81,605	1,629	35
36	Oregon	18	2,518	508	88,861	2,131	15	908	173	30,141	688	33	3,426	681	119,002	2,819	36
37	Pennsylvania	39	5,802	1,055	144,225	4,873	203	30,029	4,887	777,925	25,017	242	35,841	5,942	922,850	29,890	37
38	Rhode Island	3	445	90	7,741	345	11	1,899	288	50,969	1,521	14	2,344	378	58,710	1,866	38
39	South Carolina	6	528	114	21,384	573	23	1,867	344	67,016	1,369	29	2,415	458	88,400	1,942	39
40	South Dakota	17	1,410	304	49,080	1,194	12	638	142	21,730	507	29	2,048	446	70,820	1,701	40
41	Tennessee	11	1,662	286	67,991	1,540	26	1,790	332	55,991	1,446	37	3,452	618	123,192	2,986	41
42	Texas	49	5,192	1,230	231,263	4,871	52	3,172	443	102,921	1,947	101	8,364	1,673	334,184	6,818	42
43	Utah	7	1,130	238	45,529	1,023	7	253	56	12,851	306	14	1,383	294	58,440	1,331	43
44	Vermont	3	230	49	7,468	230	19	1,902	369	34,791	1,097	22	2,132	417	42,264	1,326	44
45	Virginia	3	508	104	16,362	370	47	4,418	865	148,102	3,387	50	4,926	969	164,464	3,757	45
46	Washington	24	3,101	694	109,528	3,451	30	2,808	629	100,816	2,565	54	5,909	1,314	210,344	6,016	46
47	West Virginia	9	1,230	246	39,760	1,050	15	1,756	295	44,165	1,291	24	3,015	541	84,427	2,341	47
48	Wisconsin	61	7,831	1,475	244,047	6,752	39	2,173	454	70,595	1,688	102	10,004	1,929	314,642	8,440	48
49	Wyoming	3	65	19	2,157	33	4	114	28	4,769	64	7	179	47	6,926	97	49
	Totals (1947)	1,651	141,930	27,145	4,524,859	118,780	1,965	202,601	34,110	5,652,649	158,835	3,616	344,531	61,255	10,177,508	277,615	
	(1946)	1,650	138,086	26,256	4,098,042	115,358	1,942	196,885	33,120	5,100,117	153,580	2,992	336,961	59,376	9,198,159	269,038	
	(1945)	1,636	135,481	25,465	3,887,160	110,557	1,954	195,805	32,497	4,745,712	147,694	2,990	331,286	57,962	8,632,872	258,251	
	(1944)	1,620	133,660	24,948	3,707,991	105,940	1,961	195,624	31,854	4,506,048	144,228	2,981	328,714	56,802	8,304,039	250,168	
	(1943)	1,604	130,488	24,007	3,505,240	101,150	1,952	192,210	30,731	4,456,274	140,068	2,956	322,707	54,738	7,959,670	241,218	
	(1942)	977	126,141	22,262	3,211,162	94,321	1,940	190,150	29,154	4,252,486	141,021	2,928	316,291	51,416	7,463,648	235,154	
	(1941)	963	123,331	20,145	2,961,594	90,195	1,917	182,140	26,422	3,931,141	132,472	2,910	305,471	46,567	6,892,735	222,667	
	(1940)	968	120,809	18,561	2,679,876	85,007	1,903	177,081	24,978	3,574,974	125,757	2,901	297,890	43,539	6,254,850	210,764	
	(1939)	1,001	120,740	18,044	2,602,762	81,984	1,839	172,765	23,371	3,340,488	119,342	2,840	293,505	41,415	6,104,250	201,326	
	(1938)	961	119,521	17,230	2,531,766	80,570	1,776	169,192	22,523	3,216,310	117,558	2,737	288,501	39,843	5,848,168	198,134	
	(1937)	975	115,283	16,851	2,405,114	79,113	1,718	162,474	21,511	3,201,042	114,508	2,693	277,757	38,362	5,606,156	193,621	
	(1936)	949	113,288	16,369	2,286,064	74,037	1,742	162,588	21,238	2,972,708	107,510	2,711	275,876	37,608	5,258,772	181,547	
	(1935)	970	113,268	16,033	1,950,306	69,592	1,670	155,360	20,119	2,927,207	98,088	2,640	268,628	36,152	4,877,515	167,680	
	(1934)	970	113,263	16,067	1,746,329	63,511	1,676	154,449	20,184	2,377,213	93,216	2,646	267,712	36,251	4,163,735	157,027	
	(1933)	984	115,840	16,190	1,753,565	63,021											
	(1932)	1,001	117,555	16,125	1,918,214	70,119											
	(1931)	1,011	116,935	15,961	2,013,352	73,911											
	(1930)	1,017	116,846	15,615	.....	75,162											
	(1929)	1,024	113,555	15,037	.....	75,770											
	(1928)	1,056	114,613	13,196	.....	.....											
	(1927)	1,060	108,582	.....	.....	73,813											

corresponding percentages in 1946 were 33 and 67. These statistics should be considered on the basis of the type of service involved. For example, federal hospitals of the general type, with 9.2 per cent of the total number of beds, admitted 7.4 per cent of the total number of patients, a more equable proportion. When the type of service offered is considered, increases were noted in practically all categories. General hospitals increased the number of patients admitted from 14,051,508 to 14,665,195, a gain of 613,687 patients. Appreciable decreases were noted only in admissions to the group classified as institutional, from 144,664 in 1946 to 140,276 in 1947; a part of this decrease may be accounted for by change of classification of the reporting unit. Admissions to tuberculosis sanatoriums remained about constant, with 99,741 admissions for the previous period and 99,080 this year.

Of every 1,000 patients entering hospitals during the current reporting period, 926 were admitted to general hospitals, 18 entered neuropsychiatric institutions, 14 were admitted to related institutions including convalescent homes, 10 to isolation units, 7 to eye, ear, nose and throat, 6 to tuberculosis sanatoriums, 6 to maternity hospitals, 6 to children's, 4 to industrial and 3 to orthopedic hospitals. In considering the total volume of hospital service rendered, it should be noted that outpatient activities and newborn admissions are not included in the accompanying charts and tables. Comparative data will be found in tables 1 and 2 and other tables accompanying the text.

TABLE 1.—HOSPITAL FACILITIES BY STATES AND BY CONTROL: C. PROPRIETARY

Marginal No.		Individual and Partnership					Corporations (Profit Unrestricted)					Total Proprietary					TOTAL NONGOVERNMENTAL — Totals of Tables 1B and 1C					Marginal No.
		Hospitals	Beds	Bassinets	Patients Admitted	Average Census	Hospitals	Beds	Bassinets	Patients Admitted	Average Census	Hospitals	Beds	Bassinets	Patients Admitted	Average Census	Hospitals	Beds	Bassinets	Patients Admitted	Average Census	
1	Alabama	33	1,237	245	35,273	708	10	625	137	23,391	432	43	1,862	382	58,664	1,140	70	4,390	798	142,848	3,012	1
2	Arizona	1	252	160	8,119	152	1	28	...	60	20	2	280	160	8,179	172	53	2,006	561	59,515	1,676	2
3	Arkansas	26	780	192	20,603	425	1	40	10	2,106	39	27	820	202	22,709	464	53	2,906	581	104,648	2,028	3
4	California	90	3,014	504	90,564	2,256	42	2,264	369	68,582	1,777	132	5,278	873	159,146	4,125	261	20,979	3,713	707,389	17,191	4
5	Colorado	14	474	57	6,915	381	5	211	27	2,950	99	19	685	84	9,865	480	72	5,731	721	134,067	4,316	5
6	Connecticut	2	68	...	1,085	56	9	536	...	1,444	433	10	604	...	2,529	489	56	9,351	1,190	214,196	6,007	6
7	Delaware	...	...	...	...	...	1	15	6	290	7	1	15	6	290	7	10	1,251	228	31,144	570	7
8	Dist. Columbia	2	45	8	428	29	1	240	61	8,771	213	3	285	69	9,199	242	17	3,068	630	124,771	2,415	8
9	Florida	22	607	149	16,160	327	6	261	40	4,892	142	28	868	189	21,052	469	74	4,382	491	194,536	2,969	9
10	Georgia	40	1,231	266	37,546	775	10	430	116	20,819	314	50	1,661	382	58,365	1,089	82	4,623	837	156,548	3,389	10
11	Idaho	10	260	67	7,153	136	3	116	29	3,291	81	13	376	96	10,444	217	31	1,415	264	46,810	1,059	11
12	Illinois	31	962	115	12,817	691	14	1,205	77	19,016	961	45	2,167	190	31,833	1,652	257	27,088	4,782	788,882	22,814	12
13	Indiana	17	358	92	11,938	718	5	420	20	12,461	300	22	778	112	24,399	587	71	7,622	1,510	252,316	6,180	13
14	Iowa	28	588	191	17,052	402	5	174	33	3,913	125	33	762	224	20,965	527	96	7,046	1,440	224,103	5,870	14
15	Kansas	12	272	74	5,825	140	3	98	21	3,311	53	15	370	95	9,136	193	90	5,387	1,121	162,279	4,173	15
16	Kentucky	11	361	45	8,401	184	8	373	79	17,827	228	19	734	144	26,228	412	67	4,989	900	162,260	3,765	16
17	Louisiana	25	578	160	24,172	562	9	447	75	18,561	313	34	1,025	235	42,733	875	68	4,734	842	178,383	3,478	17
18	Maine	7	150	50	3,986	102	5	150	34	3,288	103	12	300	84	7,274	205	50	2,825	586	78,744	2,140	18
19	Maryland	11	304	9	2,751	327	3	130	30	2,482	80	14	434	39	5,233	407	54	7,255	981	156,825	5,413	19
20	Massachusetts	6	196	29	2,785	151	100	910	144	20,503	701	26	1,106	183	23,278	852	153	16,694	2,796	406,678	12,582	20
21	Michigan	22	477	118	10,299	321	7	418	...	5,465	352	29	895	118	13,764	673	159	15,005	2,936	440,563	11,687	21
22	Minnesota	18	300	90	7,550	198	8	773	18	24,562	673	26	1,073	108	32,132	871	137	9,922	1,775	316,244	8,237	22
23	Mississippi	23	831	147	28,435	467	1	18	...	321	30	24	849	147	28,756	477	67	2,886	686	115,980	1,977	23
24	Missouri	14	662	70	18,086	626	7	282	97	6,403	99	25	1,044	167	24,921	725	99	10,151	1,600	306,403	8,484	24
25	Montana	4	77	21	1,768	51	2	136	36	3,746	98	6	213	57	5,514	149	40	2,629	547	81,390	2,051	25
26	Nebraska	35	615	206	18,139	362	4	203	29	3,417	160	39	818	235	21,556	522	81	4,966	951	135,131	3,326	26
27	Nevada	2	73	16	2,509	35	...	...	...	...	...	2	73	16	2,509	35	5	245	55	8,297	146	27
28	New Hampshire	...	...	...	...	...	11	100	...	66	30	11	100	...	66	30	29	2,000	422	60,284	1,611	28
29	New Jersey	6	143	20	1,291	101	5	200	5	860	213	11	343	25	2,151	314	107	13,377	2,487	342,413	10,160	29
30	New Mexico	5	74	21	2,295	34	2	50	15	1,766	32	7	124	36	4,061	66	29	1,471	258	39,619	450	30
31	New York	41	1,560	337	32,097	1,197	33	3,679	635	89,202	2,756	74	5,278	972	121,299	3,953	369	52,993	7,966	1,231,578	42,237	31
32	North Carolina	19	528	98	15,139	400	4	298	18	4,964	216	23	826	116	20,094	616	122	8,927	1,673	312,979	6,956	32
33	North Dakota	2	33	12	1,296	25	...	...	...	...	...	2	33	12	1,296	25	34	2,420	505	81,199	1,670	33
34	Ohio	10	455	30	6,867	326	7	511	4	2,502	451	17	966	34	9,369	777	159	18,906	3,347	621,153	16,001	34
35	Oklahoma	41	1,245	324	47,355	729	9	279	46	10,223	209	51	1,524	370	57,578	938	74	3,815	907	139,183	2,567	35
36	Oregon	11	349	79	12,310	226	8	238	80	15,666	249	19	587	159	25,976	475	52	4,113	840	144,378	3,294	36
37	Pennsylvania	22	708	76	8,040	623	5	247	5	2,450	215	27	1,005	81	10,523	838	209	36,476	6,099	1,037,573	30,750	37
38	Rhode Island	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	16	2,344	458	58,810	1,868	38
39	South Carolina	8	260	40	10,563	85	3	98	13	1,958	59	11	358	53	12,521	144	40	2,713	511	100,821	2,086	39
40	South Dakota	6	92	33	2,814	57	...	...	...	...	...	6	92	33	2,814	57	35	2,140	479	73,634	1,758	40
41	Tennessee	43	1,152	240	42,697	749	7	251	59	11,184	201	50	1,403	299	53,881	950	87	6,045	1,267	177,178	3,945	41
42	Texas	166	3,761	1,013	103,046	2,082	37	1,947	331	69,481	1,491	203	5,708	1,344	172,527	3,573	304	14,212	2,997	566,345	9,941	42
43	Utah	5	128	57	3,963	81	...	...	...	...	...	5	128	57	3,963	81	19	1,691	491	62,373	1,417	43
44	Vermont	2	41	16	705	7	...	...	...	...	...	2	41	16	705	7	24	2,173	333	47,460	1,843	44
45	Virginia	20	719	142	23,696	466	17	1,177	187	42,637	988	37	1,896	329	66,333	1,454	87	6,932	1,338	250,787	5,747	45
46	Washington	29	760	155	24,004	553	2	90	31	1,992	30	31	850	186	25,996	583	78	7,015	1,402	214,577	5,477	46
47	West Virginia	14	780	135	28,377	508	23	1,766	265	60,170	1,228	37	2,486	400	88,547	1,736	61	5,511	966	182,984	4,116	47
48	Wisconsin	21	460	118	10,629	224	7	425	37	5,679	363	28	885	155	16,308	587	130	10,929	2,084	330,050	9,027	48
49	Wyoming	8	158	53	5,151	61	1	19	8	697	12	9	177	61	5,848	73	16	356	108	12,774	170	49
	Totals (1947)	984	28,325	6,137	848,082	18,303	359	22,111	3,362	599,560	16,708	1,343	50,436	9,499	1,447,642	35,011	4,359	385,017	70,654	11,625,170	312,626	
	(1946)	940	28,116	6,114	817,301	17,114	346	20,883	2,957	539,879	15,470	1,286	48,999	9,041	1,357,180	32,584	4,314	385,980	68,417	10,955,280	301,522	
	(1945)	967	30,216	5,397	715,908	17,442	331	20,724	2,980	509,249	15,140	1,298	50,940	8,383	1,225,477	32,582	4,328	382,726	66,345	9,958,280	290,533	
	(1944)	1,011	27,301	5,648	678,365	16,973	337	21,052	3,052	508,624	16,051	1,348	48,353	8,700	1,187,089	33,024	4,349	377,667	65,350	9,601,826	283,791	
	(1943)	1,001	27,314	5,570	638,160	16,782	334	23,084	3,187	513,229	15,965	1,335	50,398	8,757	1,151,389	32,747	4,371	375,115	63,295	9,111,871	273,392	
	(1942)	1,069	27,996	5,147	576,466	15,715	406	23,789	3,057	495,871	15,521	1,475	51,785	8,204	1,072,287	31,236	4,471	368,046	59,609	8,535,935	267,260	
	(1941)	1,149	28,760	5,054	545,884	16,582	435	24,639	3,044	494,987	15,606	1,584	53,399	8,102	1,040,851	32,440	4,494	358,870	54,649	7,963,386	255,147	
	(1940)	1,174	29,958	4,939	500,040	15,049	449	25,108	3,021	463,644	15,666	1,623	54,066	7,941	963,684	30,715	4,524	352,556	51,380	7,214,544	241,499	
	(1939)	1,190	29,679	4,736	501,460	14,955	456	26,456	2,989	456,750	16,154	1,646	56,075	7,725	958,210	31,109	4,496	349,500	49,340	7,144,687	237,445	
	(1938)	1,188	30,193	4,557	495,553	15,295	493	30,550	3,236	470,138	15,630	1,681	56,743	7,793	965,689	30,925	4,438	346,244	47,636	6,813,763	229,019	
	(1937)	1,183	29,957	4,766	509,250	15,458	530	28,085	3,516	507,077	16,477	1,713	58,042	8,282	1,016,438	31,935	4,406	335,799	46,644	6,711,500	225,556	
	(1936)	1,204	29,496	4,256	487,797	13,677	550	28,511	3,639	497,457	16,402	1,754	57,997	7,895	985,254	30,124	4,463	332,891	45,563	6,194,699	211,661	
	(1935)	1,205	29,913	4,264	413,997	14,215	627	34,946	4,357	522,550	18,627	1,832	64,859	8,711	936,547	32,842	4,527	333,427	44,931	6,124,166	209,569	
	(1934)	1,310	29,429	4,391	366,313	12,046	629	33,679	4,038	458,382	15,985	1,939	63,201	8,429	824,616	28,031	4,565	330,213	44,660	4,968,351	185,698	
	(1933)	1,455	33,585	4,992	381,661	13,746											4,601	332,573	44,640	4,662,444	184,197	
	(1932)	1,522	25,759	5,064	428,256	16,309											4,758	334,987	44,572	5,178,366	198,277	
	(1931)	1,580	26,764	5,256	450,184	17,913											4,797	332,201	44,232	5,327,389	206,6-3	
	(1930)	1,630	26,557	5,233	.....	19,948											4,907	336,143	45,291	.....	212,045	
	(1929)	1,611	27,977	5,212	.....	20,604											4,870	324,566	41,877	.....	209,681	
	(1928)	1,630	29,710	4,843	.....	.....											5,009	325,500	37,041	.....	.....	
	(1927)	1,682	30,118	.....	.....	21,779											4,998	328,149	.....	.....	201,575	

TABLE 2.—HOSPITAL FACILITIES BY STATES AND BY TYPE OF SERVICE (Continued on next page)

Marginal No.		General					Nervous and Mental					Tuberculosis					Maternity					Industrial					Eye, Ear, Nose and Throat					Marginal No.
		Hospitals	Beds	Bassinets	Patients Admitted	Average Census	Hospitals	Beds	Bassinets	Patients Admitted	Average Census	Hospitals	Beds	Bassinets	Patients Admitted	Average Census	Hospitals	Beds	Bassinets	Patients Admitted	Average Census	Hospitals	Beds	Bassinets	Patients Admitted	Average Census	Hospitals	Beds	Bassinets	Patients Admitted	Average Census	
1	Alabama	76	5,902	1,055	206,408	3,984	8	19,226	51	21,492	9,724	8	627	2	1,597	539	8	82	67	1,659	35	..	..	..	..	..	..	..	..	..	..	1
2	Arizona	45	4,057	598	85,911	2,651	1	1,350	..	543	1,256	9	890	..	2,690	1,155	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2
3	Arkansas	50	3,745	657	120,633	2,948	2	6,495	..	4,341	6,448	2	1,351	..	1,768	1,241	1	27	4	83	7	2	275	..	5,220	115	..	..	..	..	..	3
4	California	271	48,829	4,674	1,045,263	28,871	26	37,882	5	27,808	24,656	29	4,909	..	5,527	4,512	10	661	225	7,240	227	4	599	..	11,687	566	2	54	..	1,282	34	4
5	Colorado	66	9,488	838	194,302	5,240	8	14,465	..	7,944	15,268	12	1,010	..	1,010	652	2	85	19	347	31	2	87	..	702	17	..	..	..	..	..	5
6	Connecticut	60	7,443	1,331	216,423	5,887	16	15,070	1	5,447	11,351	7	1,708	..	1,930	1,287	1	140	6	98	32	..	..	..	..	..	..	..	..	..	..	6
7	Delaware	9	1,296	228	32,734	950	2	1,757	..	385	1,713	3	222	..	175	175	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	7
8	District of Columbia	17	7,343	722	158,039	5,871	2	7,249	6	1,420	6,769	1	532	..	500	507	2	181	132	5,786	110	..	..	..	..	..	1	100	..	6,949	66	8
9	Florida	96	9,343	1,423	230,801	6,650	5	6,305	5	4,367	5,984	6	1,265	..	1,686	1,054	2	55	40	1,269	37	..	..	..	..	..	..	..	..	..	..	9
10	Georgia	160	11,657	1,362	274,736	8,432	6	11,494	4	4,990	10,576	3	2,465	..	2,546	1,173	1	6	10	71	3	2	151	..	3,736	90	1	25	..	2,527	21	10
11	Idaho	30	1,991	426	57,346	1,685	3	1,896	..	1,896	1,711	1	42	..	36	36	1	26	14	105	15	..	..	..	..	..	..	..	..	..	..	11
12	Illinois	213	36,034	5,137	929,774	28,506	31	45,309	19	18,108	42,296	20	4,061	14	5,608	3,174	6	701	205	6,306	414	1	75	..	1,646	47	3	233	..	5,463	113	12
13	Indiana	98	10,381	2,110	341,707	8,887	14	15,831	..	4,542	15,317	10	1,561	..	1,942	1,301	..	..	..	..	..	1	50	..	478	24	1	12	..	1,276	8	13
14	Iowa	106	8,497	1,624	265,999	6,734	12	12,547	10	4,599	12,556	5	675	..	597	578	2	85	55	235	26	1	50	..	478	24	..	..	..	..	..	14
15	Kansas	101	8,472	1,344	209,642	6,256	8	8,570	..	3,170	8,157	2	451	..	383	386	2	70	46	176	26	2	190	..	4,180	122	..	..	..	..	..	15
16	Kentucky	72	7,599	1,116	210,650	5,228	10	11,089	..	8,283	9,586	6	1,241	..	1,786	910	2	54	40	668	48	1	90	..	2,511	46	1	38	..	155	30	16
17	Louisiana	69	10,816	1,185	271,343	7,345	6	6,514	1	3,296	8,044	5	478	..	568	290	1	61	15	114	56	1	60	..	872	30	1	85	..	5,855	62	17
18	Maine	49	3,856	604	84,942	2,916	6	4,041	12	2,293	3,889	4	457	..	492	340	1	16	6	22	12	..	..	..	..	..	..	..	..	..	..	18
19	Maryland	46	12,044	1,284	221,840	9,103	17	11,575	..	5,707	11,095	6	1,441	..	1,246	1,246	..	..	..	..	..	..	..	..	..	..	3	110	7	5,382	69	19
20	Massachusetts	137	24,621	3,273	481,585	17,835	21	32,858	..	12,817	22,807	22	4,315	..	5,019	2,828	6	414	234	6,427	236	..	..	..	..	..	1	201	..	6,372	137	20
21	Michigan	179	27,481	3,663	691,601	20,433	22	30,458	3	9,088	29,587	23	3,786	..	4,896	3,030	4	112	107	2,326	101	2	60	..	1,280	34	1	15	..	416	1	21
22	Minnesota	150	12,856	2,143	372,039	10,551	13	16,168	19	4,983	15,472	15	1,964	..	1,588	1,532	2	86	54	1,671	32	..	..	..	..	..	1	100	..	7,236	167	22
23	Mississippi	82	5,699	794	150,576	3,273	6	5,253	..	4,103	5,734	1	457	1	368	254	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	23
24	Missouri	90	12,986	1,984	343,250	10,037	16	15,805	1	4,334	15,042	6	2,394	..	3,010	1,672	5	501	252	6,572	389	2	441	..	9,717	280	1	65	..	443	45	24
25	Montana	47	3,266	573	86,938	2,417	1	1,850	..	220	1,853	1	250	..	233	216	..	..	..	..	..	1	85	..	2,226	61	..	..	..	..	..	25
26	Nebraska	86	5,175	906	148,926	3,991	6	5,890	6	1,263	6,005	1	200	..	254	147	1	45	25	192	48	..	..	..	..	..	..	..	..	..	..	26
27	Nevada	13	758	126	18,845	526	1	375	..	137	350	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	27
28	New Hampshire	33	2,363	469	66,334	1,781	2	2,547	..	979	2,128	2	166	..	166	118	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	28
29	New Jersey	83	19,153	2,559	412,780	14,966	22	31,163	13	9,259	24,852	15	3,779	..	4,214	2,980	5	455	416	11,345	357	..	..	..	..	..	1	65	..	2,841	38	29
30	New Mexico	35	2,014	338	62,261	1,344	4	1,170	..	456	1,086	6	639	1	1,744	611	..	..	..	..	..	2	104	..	1,631	42	..	..	..	..	..	30
31	New York	327	69,955	8,825	1,581,161	56,270	55	106,537	43	29,591	105,674	51	11,012	12	11,211	8,843	11	642	463	22,731	570	2	66	..	624	22	7	679	..	33,327	397	31
32	North Carolina	125	12,734	1,994	307,768	8,501	8	9,088	2	3,028	8,651	19	3,890	..	6,324	3,035	1	50	18	143	31	1	50	..	932	35	2	52	..	4,482	36	32
33	North Dakota	41	2,785	539	68,377	2,247	2	2,115	..	479	1,997	1	350	..	263	254	1	60	6	99	24	..	..	..	..	..	..	..	..	..	..	33
34	Ohio	152	23,170	3,715	706,255	19,479	26	34,164	17	11,776	30,971	23	5,237	..	5,747	2,522	7	200	166	6,508	222	1	18	..	368	6	..	..	..	..	..	34
35	Oklahoma	97	6,485	1,009	188,388	4,276	7	8,513	..	2,852	9,329	4	620	..	1,482	484	2	47	40	462	11	..	..	..	..	..	..	..	..	..	..	35
36	Oregon	58	5,462	926	169,223	4,461	5	6,456	..	2,541	6,073	4	698	..	567	360	1	7	9	143	6	..	..	..	..	..	..	..	..	..	..	36
37	Pennsylvania	296	43,544	6,187	1,004,695	30,446	60	47,340	..	11,702	46,057	15	4,958	..	3,478	3,333	8	422	124	3,260	371	..	..	..	..	..	3	325	6	10,468	239	37
38	Rhode Island	15	3,744	297	69,859	2,981	4	4,433	..	1,138	4,014	4	991	..	3,659	585	..	..	..	..	..	..	..	..	..	..	1	15	..	439	3	38
39	South Carolina	85	6,247	867	180,734	4,695	3	4,967	1	2,471	4,877	5	834	..	917	661	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	39
40	South Dakota	46	2,731	533	63,742	2,202	3	3,328	..	743	3,012	2	322	..	506	250	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	40
41	Tennessee	88	11,145	1,264	250,907	8,791	12	9,551	6	7,297	9,850	7	1,121	1	1,598	852	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	41
42	Texas	237	25,772	3,755	746,498	18,931	17	20,809	..	12,440	20,966	16	2,705	..	3,971	1,906	3	92	66	1,254	44	5	320	..	8,718	276	4	64	..	4,359	21	42
43	Utah	27	2,299	371	73,437	1,797	2	1,697	..	697	1,799	1	96	..	115	65	1	23	26	1,002	19	..	..	..	..	..	..	..	..	..	..	43
44	Vermont	23	1,629	333	45,831	1,510	3	2,256	..	647	2,181	3	156	..	268	134	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	44
45	Virginia	94	14,189	1,678	316,123	9,998	11	13,571	12	10,165	13,654	7	1,477	..	1,431	1,241	..	..	..	..	..	1	16	..	80	3	3	74	..	5,592	28	45
46	Washington	89	13,294	1,698	308,653	9,537	7	9,899	..	3,873	9,149	11	1,515	..	2,097	1,275	2	61	30	216	50	..	..	..	..	..	..	..	..	..	..	46
47	West Virginia	66	6,832	1,018	207,355	5,151	7	4,756	17	2,967	5	1,339	..	1,171	1,055	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	47
48	Wisconsin	138	13,551	2,325	394,092	11,171	50	18,672	17	8,138	17,396	21	2,417	..	2,141	1,909	1	76	15	251	51	..	..	..	..	..	..	..	..	..	..	48
49	Wyoming	25	1,555	282	38,162	992	3	1,963	..	1,149	1,683	1	34	..	24	23	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	49
	Totals (1947)	4,539	592,453	92,393	14,965,195	456,761	585	680,913	259	291,954	651,578	441	81,328	32	99,089	62,578	109	5,442	3,312	100,382	3,929	33	2,914	..	57,110	1,809	44	2,534	13	116,583	1,553	
	(1946)	4,525	641,167	79,504	14,051,209	426,327	575	674,930	252	271,299	635,760	450	83,187	36	99,741	61,981	101	5,397	3,426	82,191	3,777	34	2,980	..	56,081	1,822	46	2,749	16	111,417	1,710	
	(1945)	4,744	922,549	78,919	15,228,270	665,105	563	657,393	295	248,876	624,349	449	78,774	54	86,186	59,767	106	5,656	3,544	77,678	3,741	36	2,963	..	58,394	1,847	42	2,694	6	108,331	1,615	
	(1944)	4,833	925,818	76,570	15,060,403	570,331	566	648,745	286	226,383	618,951	473	78,848	38	68,281	63,025	107	5,702	3,708	81,564	3,805	39	2,893	6	55,974	1,780	42	2,695	6	102,598	1,680	
	(1943)	4,885	950,576	72,839	14,454,638	529,340	575	650,993	210	206,677	619,447	455	79,860	112	91,674	65,302	112	6,085	3,800	84,974	3,908	41	3,226	2	61,240	1,920	40	2,421	6	99,948	1,322	
	(1942)	4,587	894,260	67,115	11,934,298	405,382	566	646,118	216	214,117	609,778	466	82,372	116	101,526	70,005	113	5,993	3,777	90,375	4,171	38	2,898	2	46,723	1,658	42	2,546	10	100,544	1,297	
	(1941)	4,518	853,499	61,732	10,646,947	361,414	566	638,134	179	208,897	602,179	477	82,963	99	101,473	70,577	116	5,318	3,573	64,874	3,472	37	2,902	2	46,201	1,602	41	2,502	6	97,252	1,268	
	(1940)	4,432	462,360	58,073	9,219,696	325,160	602	621,284	161	190,276	588,712	479	78,246	44	98,936	67,007	116	5,647	3,380	60,518	3,554	33	2,792	2	41,815	1,504	41	2,470	4	97,853	1,343	
	(1939)	4,356	444,947	55,183	9,018,316	307,991	600	606,294	110	180,249	577,103	480	75,972	38	90,615	65,487	118	5,553	3,196	59,381	3,552	40	2,215	5	45,085	1,622	41	2,467	..	99,291	1,329	
	(1938)	4,286	425,324	52,924	8,545,930	287,870	592	591,822	137	198,703	562,357	493	76,022	41	100,801	66,242	120	5,989	3,261	66,145	3,699	37	2,992	2	42,698	1,492	38	1,992	..	90,863	1,089	
	(1937)	4,245	412,061	51,899	8,249,773	288,289	579	579,616	124	195,824	546,906	508	76,731	33	101,839	64,899	114	5,466	3,497	59,949	3,490	36	2,855	1	41,029	1,549	39	1,946	2	95,241	1,115	
	(1936)	4,207	402,605	49,904	7,750,848	271,656	564	548,902	124	184,936	524,908	506	73,602	36	99,234	63,206	125	6,402	3,846	67,925	4,065	44	3,150	10	41,862	1,536	43	2,118	32	99,273	1,113	
	(1935)	4,257	406,374	48,757	6,875,182	261,294	592	529,311	132	173,009	507,760	496	70,373	58	96,113	60,738	121	6,141	3,825	66,623	3,582	52	3,421	11	41,432	1,576	44	2,262	11	97,191	1,060	
	(1934)	4,198	393,425	47,856	6,291,556	237,286	614	513,845	84	172,415	488,481	495	70,068	..	92,455	59,699	139	7,625	4,131	76,940	4,647	113	5,575	343	69,699	2,423	55	2,798	10	103,739	1,265	
	(1933)	4,257	396,713	47,998	6,071,312	231,406	621	498,256	..	170,433	474,787	497	70,992	90	94,327	60,301	134	7,976	4,999	82,250	4,857	118	5,923	364	69,748	2,620	56	2,622	30	106,565	1,195	
	(1932)	4,305	399,543	46,188	6,326,573	250,496	624	479,548	..	169,851	455,473	512	69,676	..	93,112	59,522	136	7,558	4,696	93,450	4,810	122	6,078	390	78,715	2,803	56	2,718	29	116,527	1,207	
	(1931)	4,309	394,333	45,434	6,321,861	247,589	587	451,345	..	.....	427,135	509	65,922	..	89,362	56,086	145	9,076	5,082	91,496	4,737	142	6,476	438	92,415	3,118	64	2,774	27	113,762	1,444	

TABLE 2.—HOSPITAL FACILITIES BY STATES AND BY TYPE OF SERVICE—(Continued)

Marginal No.		Children's					Orthopedic					Isolation					Convalescent and Rest					Hospital Departments of Institutions					All Other Hospitals					Totals					Marginal No.
		Hospitals	Beds	Bassinets	Patients Admitted	Average Census	Hospitals	Beds	Bassinets	Patients Admitted	Average Census	Hospitals	Beds	Bassinets	Patients Admitted	Average Census	Hospitals	Beds	Bassinets	Patients Admitted	Average Census	Hospitals	Beds	Bassinets	Patients Admitted	Average Census	Hospitals	Beds	Bassinets	Patients Admitted	Average Census	Hospitals	Beds	Bassinets	Patients Admitted	Average Census	
1	Alabama	1	62	..	1,778	42	1	50	..	179	37	1	900	..	15,734	350	1	16	..	409	10	4	119	1	2,671	34	..	..	..	....	....	102	18,144	1,176	251,928	14,755	1
2	Arizona	..	..	..	....	....	1	50	..	285	48	..	..	..	....	....	..	..	..	....	....	..	..	..	....	....	..	..	..	....	....	56	6,342	588	89,639	5,110	2
3	Arkansas	1	76	7	743	64	..	..	..	....	....	1	950	4	10,658	255	..	..	..	....	....	..	..	..	....	....	1	215	..	323	184	63	13,084	672	145,149	11,242	3
4	California	9	380	..	9,225	284	2	125	..	2,422	121	2	151	15	255	39	7	224	..	884	182	9	995	1	14,412	553	2	142	..	91	144	378	34,077	4,240	1,139,111	80,681	4
5	Colorado	1	100	15	9,307	148	..	..	..	....	....	..	..	..	....	....	1	23	..	74	23	4	125	..	1,439	51	..	..	..	....	....	96	23,469	892	214,359	24,859	5
6	Connecticut	..	..	..	....	....	1	175	..	221	114	..	..	..	....	....	1	110	..	902	78	8	792	9	5,109	384	4	417	2	861	316	78	22,855	1,349	252,489	19,999	6
7	Delaware	..	..	..	....	....	1	85	..	156	48	..	..	..	....	....	..	..	..	....	....	1	378	7	265	365	..	..	..	....	....	16	3,734	245	33,715	3,251	7
8	District of Columbia	1	222	..	7,731	169	..	..	..	....	....	..	..	..	....	....	1	22	..	65	13	3	300	..	2,448	174	1	102	..	39	172	29	16,321	893	177,977	13,853	8
9	Florida	..	..	..	....	....	3	210	..	914	148	1	380	6	2,200	250	3	120	..	833	75	3	143	..	2,490	55	1	62	..	61	35	120	18,189	1,474	215,653	14,317	9
10	Georgia	1	60	4	1,104	33	2	229	..	1,110	197	1	846	16	13,306	411	1	70	..	383	50	3	235	..	4,770	82	1	60	..	264	51	122	27,228	1,691	310,695	21,534	10
11	Idaho	..	..	..	....	....	..	..	..	....	....	..	..	..	....	....	..	..	..	....	....	..	..	..	....	....	..	..	..	....	....	41	3,795	440	57,849	3,165	11
12	Illinois	3	412	..	4,450	221	4	180	..	881	147	3	648	..	6,095	219	11	528	..	2,045	401	9	3,035	15	9,876	2,207	3	446	..	4,622	322	317	91,733	5,290	906,384	78,171	12
13	Indiana	..	..	..	....	....	..	..	..	....	....	..	..	..	....	....	3	300	..	7,471	240	7	659	..	4,176	263	1	22	..	214	16	136	29,449	2,110	393,626	26,039	13
14	Iowa	..	..	..	....	....	..	..	..	....	....	1	20	1	291	6	1	18	..	51	15	6	270	..	3,000	110	1	30	..	422	10	133	22,188	1,000	275,771	19,775	14
15	Kansas	..	..	..	....	....	..	..	..	....	....	..	..	..	....	....	..	..	..	....	....	4	189	1	2,454	37	1	60	..	877	10	129	18,302	1,291	223,154	14,998	15
16	Kentucky	1	75	..	1,397	45	2	125	..	275	114	1	150	..	3,304	90	..	..	..	....	....	2	170	..	1,794	87	1	100	..	160	98	99	20,092	1,160	231,123	16,291	16
17	Louisiana	..	..	..	....	....	1	60	..	102	35	..	..	..	....	....	1	32	..	145	10	1	110	..	1,167	47	1	58	..	80	379	87	20,555	1,291	283,522	16,309	17
18	Maine	1	90	..	380	75	..	..	..	....	....	..	..	..	....	....	..	..	..	....	....	..	..	..	....	....	..	..	..	....	....	61	8,490	622	86,592	7,163	18
19	Maryland	..	..	..	....	....	2	215	..	735	160	1	110	2	1,110	62	2	111	..	277	54	4	274	..	1,692	199	1	152	..	22	150	82	26,032	1,293	237,452	22,014	19
20	Massachusetts	4	551	28	10,035	372	5	555	..	611	240	4	139	..	737	37	2	52	..	56	36	9	645	10	6,143	458	4	445	..	1,159	350	225	64,774	3,432	533,511	55,470	20
21	Michigan	1	225	..	5,577	166	2	146	4	452	93	4	293	31	4,577	138	7	415	..	1,200	195	7	858	..	5,462	677	3	140	..	3,521	128	255	64,004	3,808	640,105	54,583	21
22	Minnesota	1	82	..	2,269	60	4	434	..	1,181	280	..	..	..	....	....	5	308	..	2,313	301	6	282	..	2,541	122	..	..	..	....	....	206	32,448	2,216	395,695	28,613	22
23	Mississippi	..	..	..	....	....	..	..	..	....	....	2	750	6	13,440	397	2	75	..	972	5	1	75	..	972	5	..	..	..	....	....	92	11,565	901	171,697	9,993	23
24	Missouri	2	274	..	5,397	267	2	130	..	542	105	1	142	5	3,945	105	2	69	..	273	34	8	3,256	..	5,110	2,463	2	123	..	784	93	141	36,317	2,292	383,347	31,082	24
25	Montana	..	..	..	....	....	1	24	17	304	28	1	25	..	158	11	..	..	..	....	....	..	..	..	....	....	..	..	..	....	....	52	5,502	390	90,079	4,586	25
26	Nebraska	1	90	..	380	75	1	110	..	852	79	..	..	..	....	....	2	84	..	175	76	2	58	12	587	11	..	..	..	....	....	99	11,642	1,039	152,249	10,357	26
27	Nevada	..	..	..	....	....	..	..	..	....	....	..	..	..	....	....	..	..	..	....	....	..	..	..	....	....	..	..	..	....	....	14	1,133	126	19,632	876	27
28	New Hampshire	..	..	..	....	....	1	51	..	245	23	..	..	..	....	....	1	53	..	580	9	2	92	..	1,035	59	..	..	..	....	....	39	5,912	480	68,313	5,096	28
29	New Jersey	1	70	..	1,908	30	7	484	..	2,359	290	6	1,240	4	3,736	553	5	330	..	674	246	10	480	3	3,873	310	2	64	..	298	45	156	51,934	2,994	454,387	44,589	29
30	New Mexico	..	..	..	....	....	1	100	..	412	63	..	..	..	....	....	..	..	..	....	....	..	..	..	....	....	..	..	..	....	....	48	4,227	339	56,504	3,128	30
31	New York	5	578	..	2,636	311	16	1,084	..	4,567	885	7	1,225	2	12,304	516	12	1,319	..	8,551	829	20	4,513	70	14,636	3,451	16	2,570	..	14,781	2,209	521	292,040	9,415	1,086,050	178,208	31
32	North Carolina	1	40	..	1,414	23	2	188	..	555	176	2	64	3	9,296	271	..	..	..	....	....	3	249	..	3,278	67	..	..	..	....	....	164	26,765	2,017	336,987	20,811	32
33	North Dakota	..	..	..	....	....	..	..	..	....	....	1	8	6	66	14	..	..	..	....	....	..	..	..	....	....	..	..	..	....	....	26	6,337	551	89,211	5,506	33
34	Ohio	3	477	..	13,023	398	..	..	..	....	....	..	..	..	....	....	7	429	..	1,002	303	12	972	..	9,719	468	4	744	..	3,309	99	238	61,565	3,882	760,287	55,159	34
35	Oklahoma	..	..	..	....	....	2	75	..	1,528	68	1	60	12	4,657	111	..	..	..	....	....	4	221	14	4,798	48	..	..	..	....	....	117	16,123	1,165	204,968	14,527	35
36	Oregon	..	..	..	....	....	1	60	..	332	56	2	163	2	1,200	64	..	..	..	....	....	2	92	..	1,084	24	..	..	..	....	....	74	12,738	937	175,620	11,608	36
37	Pennsylvania	5	497	1	12,383	363	4	495	..	551	301	6	1,240	17	5,903	327	14	780	20	2,975	598	17	1,002	..	8,348	694	7	927	..	2,159	729	345	101,923	6,365	1,066,665	80,398	37
38	Rhode Island	..	..	..	....	....	..	..	..	....	....	..	..	..	....	....	..	..	..	....	....	..	..	..	....	....	1	70	..	50	69	23	9,253	476	73,447	7,659	38
39	South Carolina	..	..	..	....	....	2	78	..	495	65	1	250	40	6,000	180	..	..	..	....	....	..	..	..	....	....	..	..	..	....	....	67	12,411	908	191,976	10,391	39
40	South Dakota	..	..	..	....	....	..	..	..	....	....	..	..	..	....	....	..	..	..	....	....	1	35	..	219	18	..	..	..	....	....	52	6,416	553	85,212	5,491	40
41	Tennessee	1	60	25	1,807	48	3	210	..	2,009	172	2	450	..	9,352	192	..	..	..	....	....	4	844	..	1,493	563	..	..	..	....	....	125	23,923	1,296	292,125	19,332	41
42	Texas	1	37	..	289	17	3	127	2	836	82	3	225	..	15,254	407	2	165	..	165	128	5	364	..	4,174	170	1	18	..	780	15	207	51,170	3,905	738,718	51,431	42
43	Utah	1	33	..	104	27	1	30	..	32	30	..	..	..	....	....	..	..	..	....	....	..	..	..	....	....	..	..	..	....	....	33	4,271	617	77,177	3,727	43
44	Vermont	..	..	..	....	....	..	..	..	....	....	..	..	..	....	....	..	..	..	....	....	1	12	..	123	4	..	..	..	....	....	30	4,055	333	46,809	3,029	44
45	Virginia	..	..	..	....	....	2	134	..	185	88	2	280	2	7,047	180	..	..	..	....	....	5	259	..	3,500	145	..	..	..	....	....	125	29,991	1,692	343,873	25,154	45
46	Washington	..	..	..	....	....	2	156	..	1,731	126	2	160	2	1,600	42	1	275	..	389	264	3	233	..	2,019	94	..	..	..	....	....	117	25,593	1,799	321,098	30,347	46
47	West Virginia	..	..	..	....	....	2	243	..	920	113	1	207	7	4,330	139	..	..	..	....	....	2	113	8	1,856	..	..	..	..	....	....	83	13,486	1,023	217,722	11,013	47
48	Wisconsin	1	150	..	4,915	119	..	..	..	....	....	2	305	..	1,370	50	1	83	..	40	83	4	171	..	2,955	149	..	..	..	....	....	219	35,425	2,257	404,782	30,740	48
49	Wyoming	..	..	..	....	....	..	..	..	....	....	..	..	..	....	....	..	..	..	....	....	..	..	..	....	....	..	..	..	....	....	29	3,532	232	39,335	2,508	49
	Totals (1947)	41	4,630	89	100,023	3,277	87	6,519	21	28,124	4,728	65	12,556	183	163,300	5,478	93	5,840	20	32,329	4,205	194	32,516	151	140,576	14,739	59	7,577	7	34,308	6,526	6,776	1,425,222	86,578	15,829,514	1,217,229	
	(1946)	42	4,490	110	96,026	3,257	87	6,518	19	26,960	4,709	7011	497	220	146,836	5,249	97	6,579	30	32,606	3,852	202	21,253	128	144,664	13,566	58	7,808	4	34,231	7,378	6,780	1,408,714	84,145	15,153,452	1,239,454	
	(1945)	44	4,770	81	90,097	3,495	83	6,679	19	29,154	4,781	63	8,406	87	99,599	3,223	102	9,556	32	57,383	7,009	168	17,720	52	112,211	11,093	111	21,814	60	61,021	19,222	6,511	1,738,944	83,131	16,257,402	1,405,247	
	(1944)	44	4,459	39	85,243	3,096	84	6,864	10	29,435	4,673	61	8,300	67	68,387	2,864	109	13,825	34	61,548	7,993	216	24,484	97	153,057	15,927	57	6,252	10	43,265	5,531	6,611	1,739,945	80,791	16,036,848	1,290,474	
	(1943)	40	4,194	19	84,404	2,705	84	7,025	..	34,871	5,020	57	8,313	44	69,570	3,219	126	12,453	42	54,847	8,211	203	30,224	56	141,658	15,280	39	3,884	4	28,188	3,450	6,653	1,649,254	77,134	15,374,698	1,257,174	
	(1942)	43	4,314	34	87,206	2,909	79	7,313	9	38,178	5,516	52	8,234	52	72,067	3,189	139	9,799	40	35,979	8,044	237	32,889	56	158,372	17,380	39	3,630	4	29,139	3,263	6,710	1,661,370	73,910	15,191,079	1,191,098	
	(1941)	52	6,067	337	117,428	4,139	82	7,387	10	38,270	5,691	52	6,356	21	36,399	2,093	136	9,630	36	38,862	7,967	219	27,037	114	174,335	20,593	30	3,122	..	22,764	2,673	6,158	1,324,281	66,163	11,566,188	1,087,039	
	(1940)	46	4,781	137	92,234	3,363	84	7,662	15	37,294	5,858	57	7,359	25	40,513	3,114	142	8,721	35	36,504	6,776	236	21,702	62	156,436	15,318	33	3,230	..	23,461	2,582	6,291	1,226,245	61,939	10,087,548	1,026,171	
	(1939)	48	5,151	146	95,137	3,554	82	7,706	..	36,891	5,752	60	7,100	6	30,279	2,655	139	8,821	36	34,191	6,948	232	23,014	49	160,927	18,290	30	2,796	4	18,882	2,239	6,298	1,195,026	58,764	9,879,344	996,483	
	(1938)	52	5,410	115	93,420	3,761	75	7,125	..	33,286	5,620	54	6,145	17	24,017	2,211	121	5,446	34	26,263	4,305	233	21,898	112	142,714	14,730	62	10,925	4	36,165	7,009	6,168	1,161,280	56,747	9,421,075	965,706	
	(1937)	51	5,389	111	89,584	3,714	75	6,880	10	33,015	5,503	56	6,187	23	37,795	2,633	120	5,566	38	29,411	3,955	240	21,821	61	144,189	14,498	65	9,000	8	44,599	7,903	6,138	1,124,548	55,560	9,221,517	944,436	
	(1936)	52	5,279	150	89,916	3,422	71	6,333	10	30,499	5,127	61	6,896	34	37,055	2,886	130	6,939	38	32,504	4,191	282	25,213	290	157,227	17,831	84	10,033	17	50,608	8,428	6,189	1,090,721	54,225	8,646,985	908,516	
	(1935)	51	4,874	118	83,015	3,115	68	6,394	12	28,280	5,010	73	7,780	70	47,094	3,301	135	6,233	34	28,218	4,437	273	20,393	234	143,434	13,859	89	11,778	48	47,593	10,240	6,246	1,075,139	53,510	7,717,154	875,510	
	(1934)	56	5,246	146	87,571	3,029	69	6,249	12	28,976	5,003	71	7,430	43	38,949	2,934	125	5,450	45	24,983	3,580	312	21,982	310	135,372	14,560	94	8,132	35	36,770	6,402	6,234	1,048,101	53,026	7,147,416	830,086	
	(1933)	58	5,486	136	90,307	3,018	69	6,463	10	29,570	4,964	71	6,790	16	40,604	2,801	130	5,460	30	27,388	3,402	343	21,540	132	151,974	12,991	101	8,368	18	114,849	6,643	6,457	1,027,946	52,464	7,007,982	803,271	
	(1932)	58	5,353	172	83,166	2,629	69	6,382	..	31,802	5,229	79	7,314	33	41,874	2,858	132	5,867	33	25,029	3,954	393	22,924	133	151,921	15,131	74	4,193	12	38,982	3,104	6,562	1,014,354	52,232	7,228,151	808,445	
	(1931)	60	5,463	273	83,416	3,823	68	6,569	..	37,842	5,131	86	7,993	59	49,210	2,857	133	6,123	43	28,628	4,429	434	25,421	137	131,291	16,249	76	4,107	19	35,694	2,845	6,813	974,115	51,494	7,155,976	775,396	

1947

Average Daily Census

Comparative Totals
1946: 1,239,454
1947: 1,217,229

Following the decrease in bed capacity, the average daily census for 1947 fell off by 22,225 patients. The decline in bed capacity, as previously noted, was 23,492. Again, the loss was restricted to governmental hospitals, with the federal group showing a daily census of 168,133 in comparison to 213,246 for 1946. The city-county category also showed a decrease, from 7,863 to 7,657. All other hospitals, governmental and non-governmental, reported an increase roughly paralleling the rise in bed capacity. The governmental hospitals, with 72.3 per cent of the bed capacity and 26.5 per cent of the total admissions, had an average daily census of 904,603, or 74.3 per cent of the daily patient load in all registered hospitals. In the nongovernmental classification, the church and other nonprofit hospitals reported an average of 277,615, or 22.8 per cent, while the proprietary hospitals, with a census of 35,011, had 2.9 per cent of the patient load. The general hospitals as a group reported an average census of 456,761 as compared with 496,527 for 1946, including 191,676 in the government division and 265,085 in the nongovernmental hospitals. There was a reduction of 50,648 in the governmental general hospitals, with the federal group responsible for 45,113 of the decrease. Nongovernmental general hospitals, on the other hand, showed an increase of 10,882 in the average daily census, a figure closely approximating the rise in bed capacity. The average daily census in neuropsychiatric hospitals continued to rise, with an increase of 15,809 over

TABLE G.—*Percentage of Beds Occupied*

	1945	1946	1947
According to Ownership or Control:			
Federal	71.7	80.6	78.9
State	93.7	92.3	93.5
County	75.9	79.1	81.4
City	72.9	74.8	77.4
City-county	69.3	69.7	71.1
Total governmental	82.1	86.6	87.8
Church	81.6	83.5	83.7
Nonprofit associations	75.4	77.2	78.4
Total nonprofit	77.9	79.8	80.6
Individual and partnership	57.7	60.9	64.6
Corporations (profit unrestricted)	73.0	74.1	75.6
Total proprietary	63.9	66.5	69.4
Total nongovernmental	76.0	78.1	79.1
According to Type of Service:			
General	72.0	77.4	77.1
Nervous and mental	94.9	94.2	95.7
Tuberculosis	75.8	74.4	76.9
Maternity	66.1	70.0	72.2
Industrial	62.3	61.7	64.1
Eye, ear, nose and throat	60.6	62.2	61.5
Children's	73.2	72.5	70.8
Orthopedic	71.5	72.1	72.7
Isolation	38.3	45.7	43.6
Convalescent and rest	73.3	58.5	72.0
Hospital departments of institutions	62.6	63.8	65.5
All other hospitals	88.1	90.2	86.1
Total all hospitals	80.8	84.4	83.4

TABLE H.—*Average Length of Stay per Patient in General Hospitals, 1945, 1946 and 1947*

	1945	1946	1947
According to Ownership or Control:			
Federal	31.1 days	30.3 days	29.6 days
State	18.7 days	17.6 days	16.0 days
County	19.1 days	17.3 days	16.6 days
City	14.4 days	13.6 days	13.2 days
City-county	13.4 days	12.1 days	11.7 days
All governmental general	20.2 days	22.1 days	19.5 days
Church	9.6 days	9.6 days	9.6 days
Other nonprofit associations	9.9 days	9.7 days	9.1 days
All nonprofit general	9.8 days	9.6 days	9.0 days
Individual and partnership	6.6 days	5.7 days	6.0 days
Corporations (profit unrestricted)	7.8 days	7.4 days	7.3 days
All proprietary general	7.1 days	6.3 days	6.5 days
All nongovernmental general	9.5 days	9.2 days	8.7 days
All general hospitals	15.9 days	12.9 days	11.4 days

TABLE J.—*Births in Hospitals According to Ownership or Control and According to Type of Service*

	1929	1945	1946	1947
According to Ownership or Control:				
Federal	2,296	61,874	42,674	46,081
State	9,125	32,075	38,877	51,700
County	17,527	75,433	88,702	119,020
City	45,787	125,011	139,753	191,576
City-county	8,806	20,756	24,940	32,605
Total governmental	83,541	315,149	334,946	441,382
Church	209,726	605,153	727,692	969,653
Fraternal	1,739	.....	.....	.....
Nonprofit associations	.....	793,220	867,560	1,153,861
Industrial	4,527	.....	.....	.....
Independent	283,130	.....	.....	.....
Total nonprofit	.....	1,458,373	1,594,632	2,123,516
Individual and partnership	39,436	122,582	130,702	166,363
Corporations (profit unrestricted)	.....	73,563	76,013	105,678
Total proprietary	.....	196,145	206,775	272,041
Total nongovernmental	538,355	1,654,518	1,801,427	2,395,557
According to Type of Service:				
General	566,177	1,997,772	2,070,318	2,756,959
Maternity	53,019	60,445	60,298	76,679
Children's	862	.....	.....	.....
Hospital departments of institutions	277	133	126	161
All other hospitals	1,501	1,315	1,631	3,319
Total births in all hospitals	621,836	1,960,667	2,130,373	2,837,139

TABLE K.—*Hospital Births Classified by States*

	Births		Births
Alabama	39,480	Nebraska	26,410
Arizona	17,579	Nevada	2,513
Arkansas	21,102	New Hampshire	13,006
California	194,136	New Jersey	97,416
Colorado	27,947	New Mexico	9,152
Connecticut	44,729	New York	294,653
Delaware	6,856	North Carolina	67,708
District of Columbia	28,459	North Dakota	14,592
Florida	39,853	Ohio	170,694
Georgia	49,000	Oklahoma	36,355
Idaho	11,713	Oregon	20,540
Illinois	177,930	Pennsylvania	218,772
Indiana	84,200	Rhode Island	17,847
Iowa	49,966	South Carolina	38,177
Kansas	30,693	South Dakota	12,509
Kentucky	41,052	Tennessee	46,024
Louisiana	45,749	Texas	123,448
Maine	17,305	Utah	19,218
Maryland	45,191	Vermont	7,752
Massachusetts	94,469	Virginia	50,706
Michigan	124,498	Washington	32,653
Minnesota	69,511	West Virginia	30,326
Mississippi	23,309	Wisconsin	74,015
Missouri	65,416	Wyoming	5,549
Montana	12,701		
		Total	2,837,139

the previous year. Of the total number, 651,578, governmental hospitals reported 635,702 or 97.5 per cent and the nongovernmental 15,876 or 2.5 per cent. Federal hospitals showed an increase of 10,468, state institutions 3,995, county hospitals 653 and city hospitals 29. The average daily census in nongovernmental hospitals of this type remained about constant, 15,122 in 1946 and 15,876 in 1947. The neuropsychiatric hospitals have 42.1 per cent of the total number of beds and less than 2 per cent of admissions, but care for 52.7

Percentage of Beds Occupied

Comparative Totals
1946: 84.4
1947: 85.4

The accompanying table gives comparative data relating to bed occupancy for the past three years on the basis of hospital control and type of service. A slight rise, from 84.4 per cent to 85.4 per cent, is noted for the entire group. The range begins at 64.6 per cent in the individual and partnership group and rises to 93.5

NURSING PERSONNEL AND SCHOOLS OF NURSING EDUCATION

State	Student Nurses	Accredited Schools of Nursing	Schools Offering Affiliating Courses Only: Schools	Schools Offering Affiliating Courses Only: Students	Administrative Nursing Personnel	Full Time Instructors	Supervisors and Asst. Supervisors	Head Nurses and Asst. Head Nurses	General Duty Nurses: Full Time	General Duty Nurses: Part Time	Nurses Not Classified	Total Graduate Nurses	Private Duty Nurses	Practical Nurses and Attendants	Volunteer Nurses' Aides	Orderlies	Ward Maids
Alabama	790	16	2	25	135	43	222	274	870	63	50	1,657	305	1,806	128	452	756
Arizona	345	5	1	35	42	16	59	121	515	31	17	794	158	470	5	139	203
Arkansas	539	8	1	27	70	17	113	211	578	15	56	781	121	1,702	23	130	254
California	3,116	41	12	217	460	167	1,080	1,634	8,062	807	586	14,014	1,939	9,978	558	2,600	1,796
Colorado	1,057	17	3	76	118	75	232	376	1,147	151	77	2,176	216	956	37	469	310
Connecticut	1,982	18	4	144	131	114	266	559	1,660	465	220	3,382	883	1,798	132	451	565
Delaware	453	7	..	....	25	19	61	70	171	18	17	381	126	294	11	51	166
District of Columbia	785	9	1	179	61	52	194	308	1,247	179	66	2,167	417	1,970	278	649	501
Florida	878	14	2	44	154	44	266	408	1,361	103	112	2,448	510	1,293	187	652	573
Georgia	1,490	13	1	81	156	59	257	419	1,895	58	62	2,666	498	1,709	84	915	520
Idaho	382	8	..	....	40	17	58	95	177	46	18	451	64	333	6	81	173
Illinois	6,803	93	13	548	509	319	1,508	1,583	5,342	1,045	296	10,592	1,858	6,548	538	1,129	2,705
Indiana	2,248	27	..	....	176	97	340	548	1,729	343	48	3,281	598	1,780	284	849	810
Iowa	2,016	30	2	250	154	75	418	306	1,348	358	72	2,731	399	1,388	75	548	660
Kansas	1,315	34	2	10	155	63	360	371	880	189	94	2,121	244	2,073	60	230	380
Kentucky	979	13	4	29	115	46	210	250	979	61	405	2,077	293	1,825	278	609	474
Louisiana	1,585	16	1	82	90	67	283	406	970	78	77	1,982	359	1,482	87	584	643
Maine	775	12	1	48	68	30	138	172	534	103	56	1,121	226	507	60	233	320
Maryland	1,506	22	4	345	154	91	327	514	1,398	186	121	2,601	594	2,133	312	810	1,015
Massachusetts	5,366	60	15	906	433	237	1,022	1,674	3,391	592	510	8,169	1,868	4,788	509	1,464	1,372
Michigan	3,376	34	10	352	349	190	650	1,039	3,694	924	227	7,092	767	6,019	406	1,228	1,502
Minnesota	3,428	31	9	443	360	176	564	824	2,595	969	177	5,548	636	2,433	722	567	1,227
Mississippi	571	20	..	....	87	29	158	139	451	26	35	866	178	1,108	117	270	197
Missouri	2,197	28	13	295	307	81	511	649	1,641	341	244	3,674	723	3,151	209	645	828
Montana	601	11	2	57	59	21	101	121	363	91	39	797	105	417	15	98	99
Nebraska	1,008	13	4	86	100	39	212	167	611	186	55	1,370	171	1,203	58	179	170
Nevada	....	..	..	....	12	....	21	19	147	6	14	219	61	120	....	37	51
New Hampshire	521	13	..	....	54	28	127	144	368	92	35	848	139	111	27	129	260
New Jersey	3,452	42	5	210	234	153	587	942	2,672	592	200	5,380	1,214	2,984	163	747	873
New Mexico	67	2	..	....	43	8	52	61	205	31	15	515	47	249	18	193	265
New York	9,301	109	23	1,936	927	486	2,186	4,501	12,807	2,135	1,074	24,266	5,019	21,741	1,205	3,400	4,592
North Carolina	1,990	44	4	12	200	101	426	535	1,467	166	125	2,054	635	1,749	128	1,103	793
North Dakota	833	13	..	....	53	21	119	142	397	47	22	701	64	491	52	78	142
Ohio	5,778	61	10	412	354	286	869	1,403	4,666	1,110	165	8,244	1,665	5,940	411	1,808	2,421
Oklahoma	770	12	..	....	118	31	213	214	558	83	50	1,277	241	1,140	75	328	325
Oregon	854	11	2	72	95	39	207	181	937	191	112	1,762	246	1,115	22	198	238
Pennsylvania	11,126	118	17	808	695	447	1,422	2,070	6,695	939	350	12,289	3,211	5,960	623	1,500	1,862
Rhode Island	456	5	4	408	46	35	105	181	443	177	84	1,071	92	752	55	84	157
South Carolina	1,042	16	..	....	90	39	177	259	586	46	36	1,265	241	546	79	476	294
South Dakota	639	10	..	....	53	20	113	123	349	53	44	675	59	392	18	221	136
Tennessee	1,691	15	4	44	146	62	216	341	1,302	117	62	2,146	424	2,752	79	448	800
Texas	2,721	33	..	....	401	146	791	787	2,579	226	317	5,247	1,335	4,675	825	1,700	1,212
Utah	473	6	..	....	37	26	90	100	380	105	16	754	49	418	42	64	132
Vermont	387	9	..	....	42	13	81	54	246	70	71	577	138	236	17	90	90
Virginia	1,813	30	3	148	176	73	335	504	1,303	136	106	2,775	754	2,265	80	900	522
Washington	1,579	20	7	313	169	80	329	563	2,780	190	104	3,839	313	1,893	80	780	1,013
West Virginia	1,262	26	..	....	119	59	233	360	864	57	92	1,614	385	905	80	636	472
Wisconsin	1,708	24	6	431	216	77	486	494	2,160	667	138	4,178	403	3,299	98	549	822
Wyoming	93	2	1	....	27	6	42	38	238	31	7	380	27	279	8	90	78
Totals	94,133	1,212	193	9,083	8,509	4,438	18,861	27,397	86,218	15,041	6,970	167,354	30,906	119,746	9,688	31,813	35,630

per cent of the average daily patient load, as reflected by the daily census. Census figures indicate that there were on the average 53,102 patients in governmental type tuberculosis hospitals during the reporting period with an additional 9,473 in nongovernmental sanatoriums. This represents a minor increase of 644 patients over the 1946 figure, divided proportionately between the governmental and nongovernmental groups. No significant changes are noted in comparing average daily census figures for 1946 and 1947 in the other classifications, which account for less than 4 per cent of the total census figure.

per cent in state-controlled hospitals. Governmental hospitals as a group reported a percentage of 87.8, while that in the nongovernmental hospitals was 79.1. The difference between these figures is accounted for largely by the higher proportion of neuropsychiatric beds in the governmental category.

In considering bed occupancy from the standpoint of type of service, the range starts at 43.6 per cent for isolation hospitals, with the upper level 95.7 in the neuropsychiatric group. The comparatively low rate of admissions and long periods of hospitalization in the latter type of cases should be taken into consideration

in evaluating these percentages. A range of 80 to 85 per cent probably represents the maximum limit of operating efficiency in a general hospital. Patient turnover, repairs, remodeling and reallocation preclude the possibility of a much higher proportion of beds being available. For practical purposes, a hospital indicating 80 to 85 per cent occupancy can be said to be operating at capacity. The low percentage of occupancy in the isolation group can be expected in view of the seasonal demand for beds of this type.

Average Length of Stay

Comparative Totals
1946: 12.9 days
1947: 11.4 days

The length of stay per patient in all general hospitals was reduced by 1.5 days from the 1946 average. The greatest reduction came in the governmental group, where a decrease of 2.6 days was noted. This reflects the reduced proportion of federal hospital beds, the stay in this type of hospital exceeding the other governmental classifications by 13.2 to 18.1 days. Nonprofit general hospitals reduced their average stay from 9.6 days to 9.0, while the proprietary general class showed a slight increase, from 6.3 in 1946 to 6.5 in 1947. Nongovernmental general hospitals continued their downward trend in this respect with the average patient remaining 8.7 days. The stay in governmental general exceeded that in nongovernmental hospitals by 10.8 days, and that in federal general hospitals exceeded the stay in the same group by 21.1 days. Comparative data for the past three years based on the type of control are given in detail in table H accompanying the text.

Births in Hospitals

Comparative Totals
1946: 2,136,373
1947: 2,837,139

A striking increase in the number of births in registered hospitals occurred during the 1947 reporting period. The 1946 report on hospital service indicated that, for the first time, hospital births reached the two million mark. Hospitals this year reported a total of 2,837,139 births, a record figure, representing an increase of 32.8 per cent. Births in governmental hospitals increased from 334,946 to 441,582 or 31.8 per cent; those in nonprofit association hospitals from 1,594,652 to 2,123,516, a gain of 33.1 per cent, and in the proprietary group from 206,775 to 272,041, or a 31.5 per cent gain. Over 97 per cent of the total hospital births reported occurred in general hospitals, with an additional 2.6 per cent taking place in maternity hospitals. Nongovernmental hospitals report over 84 per cent of hospital births, with the governmental group accounting for slightly less than 16 per cent. Complete statistics covering this aspect of hospital service is found in the accompanying table listing all reported births for the past three years and for the year 1929. The tremendous gain in the number of hospital births during the past 18 years is an outstanding example of the increased utilization of hospital facilities in the United States.

Nursing Service

A comparison of the data presented in the accompanying table on Nursing Personnel and Schools of Nursing with similar statistics for previous years, is of considerable interest. In 1941 there were 93,977 student nurses enrolled in accredited schools of nursing; a gradual yearly increase brought this figure to a peak total of 130,909 in 1945. In 1946 there was a decrease in the enrolment, and again in 1947 a further drop, to 94,133 students. There was also a slight drop in the number of accredited schools of nursing, from 1,229 to 1,212, during the past year.

On the other hand, it will be seen that the number of graduate nurses in hospital positions has continued to rise, with 167,354 reported in 1947, an increase of 20,752 over 1946. The classification General Duty Nurses, Full Time, accounts for 14,871 of this increase, and reference to the table Professional and Auxiliary Nursing Personnel will show that this increase was limited to nonfederal hospitals.

It was to be expected that the number of volunteer nurses' aides should continue to decrease, with 3,116 fewer reported in 1947. It is interesting to note that hospitals are making more and more use of those persons falling into the general classification of practical nurses and attendants, the figure for this group being 23,654 greater than in 1946.

PROFESSIONAL AND AUXILIARY NURSING PERSONNEL

	Federal Hospitals	Nonfederal Hospitals					Totals All Hospitals
		General	Nervous and Mental	Tuberculosis	Others	Totals	
Number of hospitals	481	4,222	549	418	686	5,875	6,276
Number of beds	213,314	640,191	612,826	72,470	66,527	1,212,018	1,425,222
Number of admissions	1,585,126	13,485,035	238,739	78,664	741,350	14,544,388	15,879,514
Average daily census	168,133	500,467	388,940	55,493	44,226	1,049,086	1,217,229
Professional Nursing Personnel							
Administrative nursing personnel	519	6,356	482	490	652	7,980	8,509
Full time instructors	269	3,856	190	62	111	4,219	4,488
Supervisors and assistant supervisors	960	15,272	1,154	530	896	17,811	18,801
Head nurses and assistant head nurses	3,506	19,959	2,031	851	1,099	23,881	27,387
General duty nurses:							
Full time	12,013	66,169	1,727	2,574	3,735	74,205	86,218
Part time	72	13,672	179	534	584	14,969	15,041
Nurses not classified	384	5,902	176	106	342	6,586	6,970
Total graduate nurses employed	17,606	131,137	5,939	5,236	7,349	149,661	167,354
Private duty nurses	63	29,982	280	290	527	30,923	30,986
Auxiliary Nursing Personnel							
Practical nurses and attendants	16,448	49,009	43,408	5,474	4,897	102,788	119,746
Volunteer nurses' aides	539	7,146	304	797	902	9,149	9,688
Orderlies	13,235	13,572	2,250	1,441	1,205	18,528	31,813
Ward maids	2,342	27,732	2,327	1,436	1,803	33,298	35,640

HOSPITALS REGISTERED BY THE AMERICAN MEDICAL ASSOCIATION

The following list contains the names of 6,276 hospitals, sanatoriums and related institutions that are located in the United States and 124 in Alaska, Canal Zone, Guam, Hawaii, Puerto Rico and Virgin Islands. The list for each state is presented in two groups: (1) hospitals and sanatoriums, and (2) related institutions. The related institutions include infirmaries, nursing homes and other institutions designed to give certain medical and nursing care in an ethical and acceptable manner, without giving a full hospital service.

Registration is a basic recognition extended to all hospitals and related institutions in accordance with the requirements outlined in the Essentials of a Registered Hospital officially adopted by the House of Delegates of the American Medical Association in 1928 and revised in 1947. *Approval*, on the other hand, is a designation extended by the Council on Medical Education and Hospitals to certain registered hospitals which meet the requirements for internship, residency or fellowship training; approval is also extended by the American College of Surgeons to those hospitals which unconditionally meet its minimum requirements for general standardization.

KEY TO SYMBOLS AND ABBREVIATIONS

* Approved for training interns by the Council on Medical Education and Hospitals. List with detailed information is sent on request.

◆ Approved for residencies or fellowships in the specialties. List with detailed information is sent on request.

▲ Approved by American College of Surgeons as meeting unconditionally its minimum requirements for general standardization.

○ School of nursing accredited by state board of nurse examiners.

◎ Affiliated for nurse training on state accredited basis.

† Figures for "average census" and "admissions" are exclusive of newborn infants.

The column headed "Type of Service" indicates the general categories of patients treated:

Card	Cardiac	ENT	Eye, ear, nose and throat	Iso	Isolation	N&M	Nervous and mental
Chil	Children	Gen	General	Mat	Maternity	Orth	Orthopedic
Chr	Chronic	Incur	Incurable	MatCh	Maternity and children	SkCa	Skin and cancer
Conv	Convalescent and rest	Indus	Industrial	McDe	Mentally deficient	TB	Tuberculosis
Drug	Drug and alcoholic	Inst	Institutional	Ment	Mental	Ven	Venereal
Epil	Epileptic						

The column headed "Control" indicates control, or auspices under which the institution is conducted:

GOVERNMENTAL			NONPROFIT ORGANIZATIONS		PROPRIETARY	
Fed	Federal	State	Church		Indiv	Individual
IA	Indian Affairs	City	NPAssn	Nonprofit Association	Part	Partnership
Army	United States Army	County			Corp	Corporation (unrestricted as to profit)
Navy	United States Navy	City-County				
USPHS	United States Public Health Service	CyCo				
Vet	Veterans Administration					

Corrections were made in the list to the time of going to press. Totals of the list, therefore, may vary from totals in Tables 1 and 2 which were necessarily compiled earlier.

ALABAMA

Hospitals and Sanatoriums	Type of Service	Ownership or Control	Beds	Average Census †	Bassinets	Number of Births	Admissions †
Albertville, 3,651—Marshall							
Sand Mountain Infirmary	Gen	Part	28	8	6	162	784
Alexander City, 6,640—Tallapoosa							
Russell Hospital	Gen	Corp	54	28	12	566	1,701
Altoona, 995—Etowah							
Klein Hospital	Gen	Indiv	37	20	3	58	821
Andalusia, 6,886—Covington							
Covington Memorial Hospital	Gen	Part	50	21	14	244	1,922
Hillcrest Infirmary	Gen	Corp	84	45	16	180	1,564
Anniston, 25,525—Calhoun							
Anniston Memorial Hosp.▲○	Gen	City	165	65	24	1,418	5,822
Atmore, 3,360—Escambia							
Atmore General Hospital	Gen	Indiv	21	7	7	99	563
Auburn, 4,652—Lee							
John Hodges Drake Hospital	Gen	State	65	19	9	173	1,321
Battles Wharf, 50—Baldwin							
Bayview Infirmary	Gen	Indiv	24	17	7	142	966
Bellamy, 450—Sumter							
Bellamy Hospital	Gen	NPAssn	16	3	2	33	166
Bessemer, 22,826—Jefferson							
Bessemer General Hospital▲	Gen	Corp	72	45	17	402	2,364
Birmingham, 267,583—Jefferson							
Baptist Hospitals◆▲○	Gen	Church	190	174	26	1,300	8,545
Children's Hospital◆▲○	Chil	NPAssn	62	42	..	....	1,178
East End Memorial Hospital	Gen	Corp	76	41	20	597	3,467
Hargis Clinic Hospital	Gen	Indiv	22	15	4	56	726
Hill Crest Sanitarium	N&M	Indiv	50	40	..	....	793
Jefferson-Hillman Hosp.◆▲○	Gen	State	564	442	80	3,200	21,928
Jefferson Tuberculosis Sanat.	TB	NPAssn	200	167	..	....	453
Mid-South Medical Center	Ven	State	900	350	..	....	15,734
Miss Quinn's Nursing Home	Conv	Part	16	10	..	....	486
Norwood Hospital◆▲○	Gen	Church	185	111	33	1,450	7,496
St. Vincent's Hospital◆▲○	Gen	Church	135	113	15	665	5,460
Slossfield Maternity Hosp.	Mat	County	12	8	16	485	504
South Highlands Infirm.◆▲○	Gen	Corp	140	135	27	991	5,613
"Sos" Crippled Children's Clinic▲	Orth	NPAssn	50	37	..	....	179
Brewton, 3,325—Escambia							
Escambia County Hospital	Gen	CyCo	30	19	6	216	1,185
Cullman, 5,674—Cullman							
Cullman Hospital	Gen	CyCo	56	37	16	1,269	3,573
Decatur, 16,604—Morgan							
Decatur General Hospital	Gen	CyCo	80	37	13	467	1,663
Morgan County Tuberculosis Sanatorium	TB	County	147	145	..	....	975
Dothan, 17,194—Houston							
Frasier-Ellis Hospital▲○	Gen	NPAssn	65	50	10	180	1,577
Moody Hospital◆○	Gen	Indiv	75	50	18	853	2,240
East Tallassee, 3,000—Tallapoosa							
Community Hospital	Gen	NPAssn	30	24	12	385	1,513
Enterprise, 4,355—Coffee							
Gibson Hospital	Gen	NPAssn	61	28	9	284	1,842
Eufaula, 6,709—Barbour							
Salter Hospital	Gen	Indiv	54	33	10	297	1,856
Fairfield, 11,765—Jefferson							
Employees' Hospital of Tennessee Coal, Iron and Railroad Company◆▲	Gen	NPAssn	257	187	42	1,595	8,117
Fayette, 2,668—Fayette							
McNease and Robertson Hospitals	Gen	Part	30	15	6	313	917
Florala, 2,969—Covington							
Lakeview Hospital	Gen	Indiv	30	6	4	61	319
Florence, 15,043—Lauderdale							
Eliza Coffee Memorial Hosp.	Gen	CyCo	92	62	26	1,168	5,422
Gadsden, 30,975—Etowah							
Baptist Memorial Hospital	Gen	Church	75	54	21	677	2,977
Etowah County Tuberculosis Sanatorium	TB	StateCo	22	17	..	....	53
Holy Name of Jesus Hosp.◆○	Gen	Church	120	106	20	1,133	7,924
Greensboro, 2,634—Hale							
Greensboro Hospital	Gen	Indiv	22	5	3	76	324
Greenville, 5,055—Butler							
Speir Hospital	Gen	Indiv	46	15	6	149	960
Stabler Infirmary	Gen	Corp	65	30	18	535	1,758

ALABAMA—Continued

Hospitals and Sanatoriums	Type of Service	Ownership or Control	Beds	Average Census †	Bassinets	Number of Births	Admissions †
Hartselle, 2,000—Morgan							
Hartselle Hospital	Gen	Indiv	25	10	4	120	1,000
Huntsville, 16,437—Madison							
Crestwood Hospital	Gen	Indiv	50	30	10	400	1,500
Huntsville Hospital▲○	Gen	CyCo	150	100	30	1,500	6,000
Jasper, 7,000—Walker							
Walker Baptist Hospital	Gen	Church	50	30	10	400	1,500
Lafayette, 2,000—Chambers							
Lafayette Hospital	Gen	Indiv	30	15	6	200	1,000
Lanett, 5,000—Chambers							
Lanett Hospital	Gen	Indiv	30	15	6	200	1,000
Luverne, 2,000—Crenshaw							
Luverne Hospital	Gen	Indiv	30	15	6	200	1,000
Marion, 3,000—Perry							
Marion Hospital	Gen	Indiv	30	15	6	200	1,000
Mobile, 78,720—Mobile							
Mobile Infirmary Association	Gen	NPAssn	100	75	20	1,000	4,000
Providence Hospital▲○	Gen	Church	200	150	40	2,000	8,000
Monroeville, 3,000—Monroe							
Monroeville Hospital	Gen	Indiv	30	15	6	200	1,000
Montgomery, 106,525—Montgomery							
Baptist Hospital▲○	Gen	Church	200	150	40	2,000	8,000
Jackson Hospital	Gen	Indiv	100	75	20	1,000	4,000
Opelika, 7,000—Lee							
Opelika Hospital	Gen	Indiv	30	15	6	200	1,000
Opp, 3,000—Covington							
Opp Hospital	Gen	Indiv	30	15	6	200	1,000
Ozark, 3,000—Dale							
Ozark Hospital	Gen	Indiv	30	15	6	200	1,000
Phenix City, 7,000—Russell							
Phenix City Hospital	Gen	Indiv	30	15	6	200	1,000
Prichard, 3,000—Mobile							
Prichard Hospital	Gen	Indiv	30	15	6	200	1,000
Roanoke, 3,000—Randolph							
Roanoke Hospital	Gen	Indiv	30	15	6	200	1,000
Russellville, 3,000—Franklin							
Russellville Hospital	Gen	Indiv	30	15	6	200	1,000
Scottsboro, 3,000—Jackson							
Scottsboro Hospital	Gen	Indiv	30	15	6	200	1,000
Selma, 3,000—Dallas							
Selma Hospital	Gen	Indiv	30	15	6	200	1,000
Sheffield, 3,000—Colbert							
Sheffield Hospital	Gen	Indiv	30	15	6	200	1,000
Talladega, 3,000—Talladega							
Talladega Hospital	Gen	Indiv	30	15	6	200	1,000
Tuscaloosa, 3,000—Tuscaloosa							
Tuscaloosa Hospital	Gen	Indiv	30	15	6	200	1,000
Tuskegee, 3,000—Macon							
Tuskegee Hospital	Gen	Indiv	30	15	6	200	1,000
Union Springs, 3,000—Bullock							
Union Springs Hospital	Gen	Indiv	30	15	6	200	1,000
Vernon, 3,000—Lamar							
Vernon Hospital	Gen	Indiv	30	15	6	200	1,000
Wetumpka, 3,000—Elmore							
Wetumpka Hospital	Gen	Indiv	30	15	6	200	1,000
Winfield, 3,000—Marion							
Winfield Hospital	Gen	Indiv	30	15	6	200	1,000

Key to symbols and abbreviations is on this page, preceding the tabulation

ALABAMA—Continued

Hospitals and Sanatoriums	Type of Service	Ownership or Control	Beds	Average Census †	Bassinets	Number of Births	Admissions †
Guntersville, 4,398—Marshall							
Guntersville City Hospital	Gen	City	50	24	12	254	1,902
Haleyville, 2,427—Winston							
Haleyville Hospital	Gen	Indiv	44	20	8	223	980
Huntsville, 13,050—Madison							
Huntsville Hospital	Gen	NPAssn	80	58	17	1,100	4,034
Jackson, 2,689—Clarke							
South Alabama Infirmary	Gen	Indiv	18	12	6	141	566
Jasper, 6,847—Walker							
Peoples Hospital◇	Gen	County	80	44	32	466	2,748
Walker County Hospital	Gen	Corp	55	37	12	197	1,875
Lafayette, 2,138—Chambers							
Batson Memorial Sanatorium	TB	Counties	75	60	..	...	114
Wheeler Hospital	Gen	Part	32	27	7	161	1,220
Langdale, 1,800—Chambers							
Langdale Hospital	Gen	NPAssn	22	11	7	310	1,201
Mobile, 78,720—Mobile							
Allen Memorial Home	Mat	Church	26	18	26	852	1,004
City Hospital◆◆◇	Gen	CyCo	200	204	42	1,151	8,064
Mobile County Tuberculosis Sanatorium	TB	NPAssn	45	31	..	...	33
Mobile Infirmary◆	Gen	NPAssn	185	107	43	1,855	7,436
Providence Hospital◇	Gen	Church	118	101	34	1,476	7,419
Station Hospital	Gen	Army	50	13	7	60	470
U. S. Marine Hospital▲	Gen	USPHS	201	133	..	...	2,439
Montgomery, 78,084—Montgomery							
Fitts Hill Hospital	Gen	Indiv	30	17	10	240	2,072
Fraternal Hospital	Gen	Indiv	42	33	12	96	1,275
Hubbard Hospital	Gen	Indiv	40	25	..	15	1,140
Kilby Prison Hospital	Inst	State	40	28	..	...	753
Montgomery Tuberculosis Sanatorium	TB	NPAssn	100	92	..	...	217
Professional Center Hospital	Gen	Indiv	32	...	16	Estab. 1947	
St. Margaret's Hospital◆◆◇	Gen	Church	158	126	25	1,516	8,431
Station Hospital▲	Gen	Army	175	97	15	402	3,380
Veterans Admin. Hospital▲	Gen	Vet	300	292	..	...	3,815
Mount Vernon, 810—Mobile							
Searcy Hospital	Ment	State	1,751	1,718	..	...	581
Opelika, 8,487—Lee							
Opelika Hospital	Gen	CyCo	30	17	8	367	1,544
Pell City, 900—Saint Clair							
Pell City Infirmary	Gen	Indiv	46	25	7	248	1,222
Prattville, 2,664—Autauga							
Prattville General Hospital	Gen	Indiv	21	20	6	228	1,242
Roanoke, 4,108—Randolph							
Knight Sanatorium	Gen	Indiv	50	28	11	123	1,151
Russellville, 3,330—Franklin							
Petty Wilson Hospital	Gen	Indiv	21	18	3	152	1,532
Franklin County Hospital	Gen	Part	35	...	10	Estab. 1947	
Scottsboro, 2,874—Jackson							
Hodges Hospital	Gen	Indiv	14	8	2	143	500
Tri-Counties Tuberculosis Sanatorium	TB	Counties	30	No data supplied			
Selma, 19,854—Dallas							
Goldsby King Memorial Hospital▲	Gen	Indiv	65	46	7	47	1,440
Selma Baptist Hospital▲	Gen	Corp	75	55	12	486	3,545
Station Hospital	Gen	Army	25	10	13	26	462
Vaughan Memorial Hospital▲	Gen	Corp	41	26	8	154	1,824
Sheffield, 7,873—Colbert							
Colbert County Hospital	Gen	CyCo	61	64	18	939	4,779
Sylacauga, 6,369—Talladega							
Drummond-Frazer Hospital▲	Gen	Corp	36	20	12	248	1,651
Sylacauga Hospital▲◇	Gen	City	78	40	18	411	2,658
Talladega, 9,288—Talladega							
Athens Hospital▲	Gen	NPAssn	82	43	20	679	3,121
Troy, 7,655—Pike							
Beard Memorial Hospital	Gen	Part	36	25	8	284	1,412
Edge Hospital	Gen	Indiv	60	35	10	281	1,728
Tuscaloosa, 37,466—Tuscaloosa							
Bryce Hospital	Ment	State	3,970	4,022	..	...	1,480
Druid City Hospital◇	Gen	CyCo	185	90	31	1,441	6,242
Stillman Institute Hospital▲	Gen	Church	43	24	5	136	1,010
Veterans Admin. Hospital▲	Ment	Vet	1,056	7.6	..	...	3,141
Tuskegee, 3,967—Macon							
Veterans Admin. Hospital◆▲	Ment	Vet	2,303	2,072	..	...	5,482
Tuskegee Institute, 375—Macon							
John Albion Andrew Memorial Hospital◇	Gen	NPAssn	141	83	24	476	2,023
Wetumpka, 3,089—Elmore							
Wetumpka General Hospital	Gen	Corp	40	21	6	135	965
York, 1,585—Sumter							
Hill Hospital	Gen	Indiv	27	10	4	71	730

Related Institutions

Birmingham, 267,583—Jefferson							
Alabama Boys' Industrial School	Inst	State	26	1	..	...	486
Highland Lying-In Hospital	Gen	Corp	36	20	16	228	486
Salvation Army Home and Hospital	Mat	Church	45	9	25	101	151
Montevallo, 1,460—Shelby							
Peterson Hall	Inst	State	35	4	..	...	1,397
Phenix City, 15,351—Russell							
Phenix City Memorial Hosp.	Gen	City	78	...	16	Estab. 1947	
Talladega, 9,288—Talladega							
Goodlowe Hospital	Gen	Church	18	1	1	...	85
Tuscaloosa, 37,466—Tuscaloosa							
Partlow State School	MrDv	State	907	904	..	...	178

ARIZONA

Hospitals and Sanatoriums	Type of Service	Ownership or Control	Beds	Average Census †	Bassinets	Number of Births	Admissions †
Ajo, 1,109—Pima							
Phelps-Dodge Hospital	Gen	NPAssn	35	20	7	121	896
Bisbee, 5,853—Cochise							
Copper Queen Hospital	Gen	NPAssn	42	22	8	301	1,195
Chandler, 1,239—Maricopa							
Station Hospital	Gen	Army	50	23	..	...	1,200
Cottonwood, 1,710—Yavapai							
Marcus J. Lawrence Memorial Hospital	Gen	NPAssn	40	22	5	...	1,006
Douglas, 8,625—Cochise							
Cochise County Hospital	Gen	County	95	56	6	45	630
Flagstaff, 5,068—Coconino							
Flagstaff Hospital	Gen	NPAssn	29	13	8	284	1,297
Station Hospital	Gen	Army	25	10	5	46	354
Florence, 1,383—Pinal							
Pinal General Hospital	Gen	County	50	23	9	280	1,349
Fort Defiance, 600—Apache							
Navajo Medical Center◆◇	GenTb	IA	250	202	14	276	2,725
Ganado, 150—Apache							
Sage Memorial Hospital◆◇	Gen	Church	150	76	15	177	2,201
Globe, 6,141—Gila							
Gila County Hospital	Gen	County	50	36	7	309	1,387
Holbrook, 1,184—Navajo							
Holbrook Municipal Hospital	Gen	City	15	4	5	105	363
Jerome, 2,295—Yavapai							
United Verde Hospital▲	Gen	NPAssn	51	15	6	114	752
Keams Canyon, 150—Navajo							
Hopi General Hospital	Gen	IA	38	34	3	83	974
Kingman, 2,300—Mohave							
Mohave General Hospital	Gen	County	50	30	11	247	1,275
McNary, 55—Apache							
McNary Hospital	Gen	NPAssn	12	4	2	72	385
Mesa, 7,224—Maricopa							
South Side District Hospital	Gen	NPAssn	100	52	18	468	3,743
Miami-Inspiration Hospital▲	Gen	NPAssn	48	23	6	286	1,230
Morenci, 1,500—Greenlee							
Morenci Hospital▲	Gen	NPAssn	54	32	8	260	1,796
Nogales, 5,135—Santa Cruz							
St. Joseph's Hospital	Gen	Church	26	12	6	171	630
Parker, 300—Yuma							
Colorado River Indian Hosp.	Gen	IA	15	11	4	55	420
Phoenix, 65,414—Maricopa							
Arizona State Hospital	Ment	State	1,350	1,256	..	...	543
Convalescent Home for Crippled Children	Orth	State	50	50	..	...	250
Good Samaritan Hospital◆▲◇	Gen	Church	221	180	42	1,892	8,417
Phoenix Indian Hospital▲	Gen	IA	65	51	10	116	866
Phoenix Indian Sanatorium▲	TB	IA	80	67	..	...	109
St. Joseph's Hospital◆▲◇	Gen	Church	195	184	43	2,903	8,156
St. Luke's Sanatorium	TB	Church	82	45	..	...	158
St. Monica's Hospital and Health Center◆▲◇	Gen	Church	231	178	20	982	6,383
Veterans Admin. Hospital	Gen	Vet	144	130	..	...	2,760
Prescott, 6,018—Yavapai							
Prescott Community Hospital	Gen	NPAssn	44	26	8	273	1,506
Yavapai County Hospital	Gen	County	70	45	8	98	507
Ray, 1,100—Pinal							
Kennecott Copper Corp. Hosp.	Gen	NPAssn	20	10	8	102	720
Sacaton, 315—Pinal							
Pima Indian Hospital	Gen	IA	42	27	7	168	1,075
Safford, 2,296—Graham							
Morris-Squibb Hospital	Gen	NPAssn	37	12	13	224	745
San Carlos, 100—Gila							
San Carlos Indian Hospital	Gen	IA	47	24	6	60	519
Tempe, 2,906—Maricopa							
State Welfare Sanatorium	TB	State	90	80	..	...	103
Tempe Clinic Hospital	Gen	Indiv	25	16	16	353	811
Tuba City, 150—Coconino							
Western Navajo Hospital▲	Gen	IA	44	34	6	80	1,136
Tucson, 36,818—Pima							
Barfield Sanatorium	TB	Corp	28	20	..	...	60
Comstock Children's Hospital	TB	NPAssn	37	30	..	...	50
Pima County General Hosp.◆▲	GenTb	County	150	98	4	14	1,321
St. Luke's in the Desert Sanitarium	TB	Church	32	26	..	v .	47
St. Mary's Hospital and Sanatorium◆◆▲◇	GenTb	Church	210	171	56	1,356	6,460
San Xavier Sanatorium	TB	IA	46	32	..	...	68
Southern Pacific Sanatorium	TB	NPAssn	58	46	..	...	99
Station Hospital▲	Gen	Army	260	30	..	...	1,840
Tucson Medical Center◆▲	Gen	NPAssn	192	125	50	1,291	5,991
Veterans Admin. Hospital▲	TB	Vet	428	396	..	...	2,150
Whipple,—Yavapai							
Veterans Admin. Center▲	TB	Vet	391	357	..	...	1,853
Whiteriver, 300—Navajo							
Fort Apache Agency Hospital	Gen	IA	50	24	4	67	915
Winslow, 4,577—Navajo							
Winslow Indian Sanatorium and Hospital▲	Gen	IA	50	29	5	108	892
Yuma, 5,325—Yuma							
Fort Yuma Indian Hospital▲	Gen	IA	28	10	8	31	355
Yuma County General Hosp.	Gen	County	100	54	16	605	2,444

Related Institutions

Phoenix, 65,414—Maricopa							
Casitas del Sol Sanatorium	TB	Indiv	13	11	..	v..	25
Tucson, 36,818—Pima							
Arizona State Elks Hospital	TB	NPAssn	55	24	..	...	55
Wickenburg, 995—Maricopa							
Community Hospital	Gen	NPAssn	21	9	7	43	471

Key to symbols and abbreviations is on page 1398

ARKANSAS

Hospitals and Sanatoriums	Type of Service	Ownership or Control	Beds	Average Census †	Bassinets	Number of Births	Admissions †
Alexander, 134—Pulaski							
Thomas C. McRae Memorial Sanatorium	TB	State	196	186	..	...	257
Batesville, 5,247—Independence							
Allen Hospital	Gen	Part	34	19	14	456	1,431
Craig Hospital	Gen	Indiv	12	11	6	150	753
Dr. Gray's Hospital	Gen	Indiv	30	32	8	176	1,981
Bertie, 1,189—White							
Sloan Hospital	Gen	Indiv	12	8	6	96	406
Benton, 3,562—Saline							
State Hospital	Unit of State Hospital, Little Rock						
Blytheville, 10,657—Mississippi							
Blytheville Hospital	Gen	Indiv	35	20	6	200	1,200
Walls Hospital	Gen	Indiv	50	33	12	308	2,402
Camden, 8,975—Ouachita							
Camden Hospital	Gen	NPAssn	50	34	15	519	2,646
Charleston, 1,908—Franklin							
Bollinger Hospital	Gen	Indiv	12	3	4	160	300
Clarksville, 3,118—Johnson							
St. Hildegard's Municipal Hospital	Gen	Church	27	17	10	324	1,118
Conway, 5,782—Faulkner							
Conway Memorial Hospital	Gen	NPAssn	30	21	10	348	1,478
Crossett, 4,801—Ashley							
Crossett Health Center	Gen	NPAssn	35	19	11	128	630
DeQueen, 3,055 Sevier							
Archer Hospital	Gen	Indiv	22	No data supplied			
DeQueen General Hospital	Gen	NPAssn	35	13	11	282	1,491
Dermott, 3,083—Chicot							
St. Mary's Hospital	Gen	Church	29	19	8	209	1,192
Dumas, 2,325—Desha							
Dumas Hospital	Gen	NPAssn	25	12	9	150	873
El Dorado, 15,856—Union							
Warner Brown Hospital‡◇	Gen	Church	76	50	18	669	4,920
Fayetteville, 8,212—Washington							
Fayetteville City Hospital‡	Gen	City	80	62	20	1,032	5,827
Veterans Admin. Hospital‡	Gen	Vet	305	250	..	...	3,861
Forrest City, 5,609—St. Francis							
Roy Hospital	Gen	Part	40	15	10	125	850
Fort Smith, 36,584—Sebastian							
Arkansas Tuberculosis Sanat.	Unit of Arkansas Tuberculosis Sanatorium, State Sanatorium, Ark.						
St. Edward's Mercy Hosp.‡◇	Gen	Church	145	140	35	1,166	5,647
Sparks' Memorial Hospital‡◇	Gen	NPAssn	100	79	18	484	2,538
Haskell, 171—Saline							
State Hosp., Benton Division	Unit of State Hospital, Little Rock						
Heber Springs, 1,656—Cleburne							
Estelle Hospital	Gen	Indiv	17	10	6	114	417
Helena, 8,546—Phillips							
Helena Hospital	Gen	NPAssn	70	45	10	400	2,611
Hope, 7,475—Hempstead							
Branch Hospital	Gen	Indiv	16	..	..	Estab. 1947	
Josephine Hospital	Gen	Indiv	26	11	5	150	565
Julia Chester Hospital	Gen	NPAssn	50	18	9	196	920
Hot Springs National Park, 21,570—Garland							
Army and Navy Gen. Hosp.‡◇	Gen	Army	410	324	6	83	3,956
Leo N. Levi Memorial Hospital‡◇	Gen	NPAssn	112	75	13	146	1,256
Methodist Hospital	Gen	Church	53	45	12	243	2,564
St. Joseph's Infirmary‡◇	Gen	Church	167	145	30	700	5,250
U. S. Public Health Service Medical Center	Ven	USPHS	960	255	..	...	10,038
Jonesboro, 11,729—Craighead							
St. Bernard's Hospital‡◇	Gen	Church	160	88	15	1,072	4,663
Lake Village, 2,045—Chicot							
Lake Village Infirmary	Gen	Part	40	18	8	188	1,215
Little Rock, 88,039—Pulaski							
Arkansas Children's Home and Hospital‡◇	Chil	NPAssn	76	64	7	....	743
Baptist State Hospital‡◇	Gen	Church	271	229	40	1,373	10,174
Granite Mountain Hospital	Gen	Indiv	20	4	2	18	221
Missouri Pacific Hospital‡	Indus	NPAssn	125	54	..	....	2,305
Pulaski County Hospital	Chr	County	215	184	..	....	223
St. Vincent Infirmary‡◇	Gen	Church	210	200	50	1,981	9,360
State Hospital	Ment	State	4,735	4,767	..	....	1,892
Trinity Hospital	Gen	Part	40	18	10	119	1,200
United Friends of America Hospital	Gen	NPAssn	25	18	5	64	1,765
University Hospital‡◇	Gen	State	210	140	30	1,191	4,145
Magnolia, 4,326—Columbia							
City Hospital	Gen	City	42	33	12	243	1,946
Monticello, 3,650—Drew							
Mack Wilson Hospital	Gen	Indiv	30	15	7	213	944
Morrilton, 4,656—Conway							
St. Anthony's Hospital‡	Gen	Church	56	29	9	354	1,380
Newport, 4,321—Jackson							
Dr. Gray's Hospital	Gen	Indiv	25	16	6	145	958
Newport Hospital	Gen	Part	35	18	12	135	1,119
North Little Rock, 21,137—Pulaski							
Veterans Admin. Hospital‡◇	Ment	Vet	1,760	1,681	..	....	2,449
Paragould, 7,079—Greene							
Dickson Memorial Hospital	Gen	Corp	40	30	10	490	2,166
Pine Bluff, 21,296—Jefferson							
Davis Hospital‡	Gen	City	120	82	20	1,008	4,302
Prescott, 3,177—Nevada							
Cora Donnell Hospital	Gen	Indiv	25	13	7	155	1,156
Russellville, 5,927—Pope							
St. Mary's Hospital	Gen	Indiv	60	45	12	485	1,959
Searcy, 3,679—White							
Hawkins Clinic Hospital	Gen	Indiv	30	12	7	155	858
Porter Rodgers Hospital	Gen	Indiv	54	50	14	480	3,642

ARKANSAS—Continued

Hospitals and Sanatoriums	Type of Service	Ownership or Control	Beds	Average Census †	Bassinets	Number of Births	Admissions †
Siloam Springs, 2,764—Benton							
John Brown University Hosp.	Gen	NPAssn	27	14	18	148	705
State Sanatorium, 300—Logan							
Arkansas Tuberculosis Sanat.▲	TB	State	1,135	1,055	..	...	1,502
Texarkana, 11,821—Miller							
Michael Meagher Memorial Hospital‡	Gen	Church	55	49	12	981	3,521
St. Louis Southwestern Hospital‡	Indus	NPAssn	150	61	..	...	2,915
Warren, 2,516—Bradley							
Hunt Hospital	Gen	Indiv	26	8	6	149	495

Related Institutions

Bentonville, 2,359—Benton							
Bates Memorial Hospital	Gen	City	50	15	9	302	994
Booneville, 2,324—Logan							
McConnell Hospital	Gen	Indiv	18	3	6	94	302
Hot Springs National Park, 21,570—Garland							
Alamo Hospital	Gen	Indiv	27	7	4	25	63
Texarkana, 11,821—Miller							
Jamison Sanitarium	Gen	Indiv	21	7	6	89	327

CALIFORNIA

Hospitals and Sanatoriums	Type of Service	Ownership or Control	Beds	Average Census †	Bassinets	Number of Births	Admissions †
Agnew, 300—Santa Clara							
Agnews State Hospital	Ment	State	3,603	3,612	..	...	3,102
Ahwahnee, 50—Madera							
Ahwahnee Sanatorium	TB	Counties	101	89	..	...	102
Alameda, 36,256—Alameda							
Alameda Hospital‡	Gen	NPAssn	97	71	22	1,338	5,184
Albany, 11,455—Alameda							
Albany Hospital	Gen	Indiv	30	24	20	900	1,887
Alcatraz, —San Francisco							
U. S. Penitentiary Hospital‡	Inst	USPHS	20	9	..	...	172
Alhambra, 38,925—Los Angeles							
Alhambra Hospital‡	Gen	Corp	60	42	18	904	2,540
Antioch, 5,168—Contra Costa							
Antioch General Hospital	Gen	Corp	20	15	8	250	1,042
Arcata, 1,855—Humboldt							
Trinity Hospital	Gen	Church	35	27	7	131	1,434
Arlington, 5,440—Riverside							
Riverside County Hospital	See Riverside						
Artesia, 3,891—Los Angeles							
Artesia Hospital	Gen	Indiv	25	17	14	784	1,480
Atwater, 1,235—Merced							
Bloss Memorial Hospital	Unit of Merced General Hospital, Merced						
Auberry, 200—Fresno							
Wish-I-ah Sanatorium	TB	County	116	100	..	...	110
Auburn, 4,063—Placer							
DeWitt State Hospital	Ment	State	2,000	871	..	...	952
Highland General Hospital	Gen	Part	26	22	6	347	1,928
Placer County Hospital	InstGen	County	200	140	5	55	600
Bakersfield, 29,252—Kern							
Bakersfield Hospital	Gen	Indiv	30	29	..	...	1,705
Kern General Hospital‡◇	Gen	County	375	335	44	1,943	10,939
Mercy Hospital‡	Gen	Church	100	79	30	1,434	4,278
Banning, 3,874—Riverside							
Southern Sierras Sanatorium	TB	Indiv	53	14	..	...	43
Bell, 11,764—Los Angeles							
Bell Mission Hospital	Gen	Corp	29	22	11	588	1,522
Belmont, 1,229—San Mateo							
Alexander Sanitarium	N&M	Corp	75	75	..	...	566
California Sanatorium	TB	Corp	110	90	..	...	225
Twin Pines Sanitarium	N&M	Corp	45	47	..	...	339
Berkeley, 85,547—Alameda							
Alta Bates Hospital‡	Gen	NPAssn	112	88	42	2,070	6,031
Ernest V. Cowell Memorial Hospital‡	Inst	State	100	37	..	...	2,730
Herrick Memorial Hospital‡◇◇	Gen	NPAssn	200	169	40	1,965	7,182
Brawley, 11,718—Imperial							
Brawley Community Hospital	Gen	Part	25	16	9	144	960
Burbank, 34,337—Los Angeles							
St. Joseph's Hospital‡	Gen	Church	125	103	30	1,437	4,745
Camarillo, 300—Ventura							
Camarillo State Hospital	Ment	State	4,758	4,614	..	...	1,949
Camp Stoneman, —Contra Costa							
Station Hospital	Gen	Army	500	320	8	91	13,012
Carmel, 2,837—Monterey							
Peninsula Community Hosp.	Gen	NPAssn	53	41	13	547	1,110
Chula Vista, 5,128—San Diego							
Chula Vista Hospital	Gen	Indiv	27	20	8	196	1,000
Clovis, 1,626—Fresno							
Clovis Sanitarium	Gen	Part	15	10	4	102	622
Coalinga, 5,026—Fresno							
Coalinga District Hospital	Gen	NPAssn	28	18	8	257	1,413
Colfax, 794—Placer							
Colfax Hospital for the Tuberculous	TB	Corp	34	28	..	...	84
Compton, 16,198—Los Angeles							
Compton Sanitarium‡◇	N&M	Corp	122	88	..	...	694
Los Campanas Hospital	Gen	Corp	46	37	16	915	2,452
Women's and Children's Hospital	Gen	Indiv	20	10	7	201	770
Concord, 1,273—Contra Costa							
Concord Hospital	Gen	Corp	34	24	12	388	1,295
Corona, 8,764—Riverside							
Corona Hospital	Gen	Indiv	31	13	9	222	761
U. S. Naval Hospital‡◇	Gen	Navy	700	925	..	...	4,713

Key to symbols and abbreviations is on page 1396

CALIFORNIA—Continued

Hospitals and Sanatoriums	Type of Service	Ownership or Control	Beds	Average Census †	Bassinets	Number of Births	Admissions †
Coronado, 6,932—San Diego							
Coronado Hospital♦	Gen	NPAssn	30	15	8	206	908
Covina, 3,049—Los Angeles							
Covina Hospital	Gen	Part	50	39	13	576	1,956
Crescent City, 1,363—Del Norte							
Seaside Hospital	Gen	County	29	18	6	163	861
Culver City, 8,976—Los Angeles							
Community Hospital	Gen	Indiv	13	9	..	....	509
Culver City Hospital	Gen	Corp	52	38	14	715	2,177
Delano, 4,573—Kern							
Delano Hospital	Gen	Indiv	23	15	7	217	842
Dinuba, 3,710—Tulare							
Alta District Hospital	Gen	Indiv	19	10	6	160	950
Dos Palos, 978—Merced							
Dos Palos Community Hosp.	Gen	Part	17	7	5	185	636
Downey, 15,000—Los Angeles							
Downey Community Hospital	Gen	Corp	42	31	18	533	1,905
Duarte, 2,000—Los Angeles							
Los Angeles Sanatorium♦♦	TB	NPAssn	250	238	..	..	129
El Centro, 10,017—Imperial							
Imperial County Charity Hospital	Gen	County	100	70	5	142	1,227
Eldridge, 16—Sonoma							
Sonoma State Home	MeDe	State	3,427	3,442	..	....	460
El Monte, 4,746—Los Angeles							
Ruth Home	VenMat	NPAssn	135	35	15	14	138
El Toro,—Orange							
U. S. Marine Corps Air Station Dispensary	Gen	Navy	140	6	..	....	2,325
Esralon, 785—San Joaquin							
Pioneer Memorial Hospital	Gen	Indiv	14	6	3	89	352
Escondido, 4,560—San Diego							
Escondido Community Hosp.	Gen	Indiv	20	16	6	356	892
Eureka, 17,055—Humboldt							
General Hospital	Gen	NPAssn	58	51	8	984	2,657
Humboldt County Community Hospital	InstGen	County	223	57	6	43	1,002
Humboldt County Sanitarium	TB	County	65	29	..	....	73
St. Joseph Hospital	Gen	Church	65	32	18	551	2,616
Fairfield, 1,312—Solano							
Solano County Hospital	InstGen	County	123	102	6	170	1,076
Station Hospital	Gen	Army	125	50	..	....	1,008
Fort Baker (Sausalito P.O.)—Marin							
Station Hospital	Gen	Army	50	15	10	169	635
Fort Bragg, 3,725—Mendocino							
Redwood Coast Hospital♦	Gen	Corp	27	16	8	148	799
Fort Ord,—Monterey							
Station Hospital♦	Gen	Army	400	270	36	132	5,788
Fowler, 1,531—Fresno							
Fowler Municipal Hospital	Gen	City	10	7	5	224	604
French Camp, 600—San Joaquin							
San Joaquin General Hospital♦♦♦	Gen	County	565	533	98	1,051	12,740
Fresno, 60,685—Fresno							
Fresno Community Hospital	Gen	NPAssn	155	118	24	1,711	6,502
General Hospital of Fresno County♦♦♦	Gen	County	547	448	26	953	8,592
St. Agnes Hospital♦	Gen	Church	97	82	26	1,548	4,951
Fullerton, 6,442—Orange							
Fullerton Hospital♦	Gen	Church	44	20	11	795	2,115
Gilroy, 3,615—Santa Clara							
Wheeler Hospital	Gen	NPAssn	26	19	8	405	1,190
Glendale, 82,582—Los Angeles							
Behrens Memorial Hospital	Gen	NPAssn	76	51	19	462	2,659
Glendale Sanitarium and Hospital♦♦♦	Gen	Church	225	180	40	1,797	7,118
Physicians and Surgeons Hospital♦	Gen	NPAssn	110	105	35	2,000	5,656
Grass Valley, 3,701—Nevada							
Community Hospital	Gen	Indiv	19	16	6	267	1,021
W. C. Jones Memorial Hosp.	Gen	Indiv	18	8	3	61	394
Hamilton Field,—Marin							
Station Hospital♦	Gen	Army	200	117	13	306	3,304
Hanford, 8,234—Kings							
Hanford Sanitarium	Gen	Corp	30	27	8	326	1,115
Kings County Hospital	Gen	County	225	154	16	388	2,308
Sacred Heart Hospital	Gen	Church	30	23	9	537	1,421
Hawthorne, 8,563—Los Angeles							
Hawthorne Hospital	Gen	Indiv	43	35	10	760	2,270
Hayward, 6,736—Alameda							
Hayward Hospital	Gen	Indiv	30	23	14	1,081	2,122
Healdsburg, 2,307—Sonoma							
Healdsburg General Hospital	Gen	Corp	25	13	6	216	1,014
Herlong,—Lassen							
Station Hospital	Gen	Army	35	7	6	119	504
Hollister, 3,581—San Benito							
Hazel Hawkins Memorial Hospital	Gen	NPAssn	16	19	8	307	952
San Benito County Hosp.	InstGen	County	10	5	5	5	52
Hondo, 3,150—Los Angeles							
Rancho Los Amigos	Ment	County	9,638	2,522	..	....	3,190
Hoopa, 140—Humboldt							
Hoopa Valley Indian Hosp.	Gen	IA	20	12	4	30	435
Huntington Park, 28,648—Los Angeles							
Mission Hospitals	Gen	Corp	38	32	16	787	1,900
Imola, 30—Napa							
Napa State Hospital♦	Ment	State	4,347	4,650	..	....	1,419
Indio, 2,286—Riverside							
Casita Hospital	Gen	Indiv	21	11	9	177	836
Coachella Valley Hospital	Gen	Corp	30	21	6	251	1,541
Inglewood, 30,114—Los Angeles							
Centinela Hospital	Gen	Indiv	75	71	20	1,307	3,699
St. Ezra Sanitarium	N&M	Indiv	200	199	..	....	195
Stork Nest Hospital	Mat	Part	21	14	17	741	753

CALIFORNIA—Continued

Hospitals and Sanatoriums	Type of Service	Ownership or Control	Beds	Average Census †	Bassinets	Number of Births	Admissions †
Keene, 164—Kern							
Stony Brook Retreat	TB	County	102	95	..	....	72
King City, 1,768—Monterey							
Community Hospital	Gen	Indiv	22	21	4	198	1,233
Kingsburg, 1,504—Fresno							
Kingsburg Sanitarium	Gen	Indiv	21	18	6	181	831
La Crescenta, 3,000—Los Angeles							
Hillcrest Sanatorium	Unit of Olive View Sanatorium, Olive View						
La Jolla,—San Diego							
Scripps Memorial Hospital♦	Gen	NPAssn	56	44	9	480	2,080
Scripps Metabolic Clinic-Hosp.	Metab	NPAssn	36	31	..	..	1,505
Lake Port, 1,496—Lake							
Lakeside Hospital	Gen	Part	22	20	6	102	803
La Vina, 35—Los Angeles							
La Vina Sanatorium	TB	NPAssn	49	47	..	....	57
Lindsay, 4,307—Tulare							
Lindsay Municipal Hospital	Gen	City	24	No data supplied			
Livermore, 2,865—Alameda							
Arroyo Del Valle Sanatorium	See Oakland						
Livermore Sanitarium♦	N&M	Corp	120	112	..	....	680
St. Paul's Hospital	Gen	Indiv	23	15	6	714	1,074
Veterans Admin. Hospital♦	TB	Vet	452	410	..	..	606
Lodi, 11,679—San Joaquin							
Buchanan Hospital	Gen	Indiv	34	18	9	505	1,603
Mason Hospital	Gen	Indiv	28	7	4	206	1,056
Loma Linda, 2,500—San Bernardino							
Loma Linda Sanitarium and Hospital♦♦♦	Gen	Church	143	133	20	749	5,085
Lompoc, 3,379—Santa Barbara							
Lompoc Community Hosp.	Gen	NPAssn	30	18	14	203	643
Lone Pine, 900—Inyo							
Mount Whitney Hospital	Gen	Indiv	20	6	4	61	636
Long Beach, 164,271—Los Angeles							
Bixby Knolls Hospital	Mat	Part	22	17	22	982	1,029
Harriman Jones Clinic Hosp.	Gen	Part	48	36	16	514	1,578
Long Beach Community Hospital♦	Gen	NPAssn	150	127	30	1,606	7,830
St. Mary's Long Beach Hospital♦	Gen	Church	100	75	33	1,846	5,454
Seaside Memorial Hospital♦♦♦	Gen	NPAssn	170	291	55	2,088	14,273
U. S. Naval Hospital♦♦♦	Gen	Navy	1,375	1,212	50	1,387	26,727
Los Angeles, 1,504,277—Los Angeles							
Alvarado Hospital	Gen	NPAssn	36	18	..	....	1,093
Barlow Sanatorium♦♦♦	TB	NPAssn	100	97	..	....	85
California Babies' and Children's Hospital	Chil	NPAssn	30	6	..	....	449
California Hospital♦♦♦	Gen	Church	317	286	48	3,287	14,406
Cedars of Lebanon Hosp.♦♦♦	Gen	NPAssn	310	283	50	2,339	10,897
Childrens Hospital♦♦♦	Chil	NPAssn	203	149	..	....	5,220
Eye and Ear Hospital	ENT	Corp	19	13	..	....	3,620
French Hospital	Gen	NPAssn	76	53	16	475	2,327
Hollywood-Leland Hospital	Gen	Part	31	29	..	....	1,731
Hospital of the Good Samaritan♦♦♦	Gen	Church	419	372	55	2,479	11,452
Hygeia Sanatorium	Alcoh	Indiv	11	7	..	..	340
Juvenile Hall Hospital	Gen	County	95	82	..	....	5,044
Lincoln Hospital	Gen	NPAssn	32	21	13	767	1,682
Los Angeles County Hospital (Medical Unit)♦♦♦	Gen	County	3,394	2,826	230	4,677	58,418
Los Angeles County Jail Hospital	Inst	County	64	55	..	....	2,083
Los Angeles County Psychopathic Hospital	Unit of Los Angeles County Hospital						
Los Angeles Neurological Institute	N&M	Corp	34	22	..	....	214
Los Angeles Sanatorium	Chr	Indiv	36	19	..	....	172
Methodist Hospital of Southern California♦♦	Gen	Church	206	165	48	2,029	7,815
Orthopaedic Hospital♦♦♦	Orth	NPAssn	75	71	..	....	2,192
Pahl Hospital	Gen	Indiv	15	7	3	198	501
Presbyterian Hospital-Olmsted Memorial♦♦♦	Gen	Church	300	248	65	2,577	11,182
Queen of Angels Hosp.♦♦♦	Gen	Church	502	415	113	4,450	16,253
St. Vincent's Hospital♦♦♦	Gen	Church	250	240	50	2,117	15,944
Santa Fe Coast Lines Hospital♦♦♦	Indus	NPAssn	106	175	..	....	4,545
Veterans Admin Center♦♦	MentGen	Vet	3,554	3,001	..	....	13,561
White Memorial Hosp.♦♦♦	Gen	Church	225	169	30	1,746	8,961
Los Banos, 2,214—Merced							
City Clinic and Emergency Hospital	Gen	Church	14	10	3	116	541
Lynwood, 10,982—Los Angeles							
St. Francis Hospital♦	Gen	Church	150	134	48	1,999	7,290
Madera, 6,457—Madera							
Dearborn Hospital	Gen	Corp	30	21	6	400	1,696
Madera County Hospital	Gen	County	125	95	8	161	1,172
Madera Sanitarium	Gen	Indiv	21	14	5	298	1,420
Manor,—Marin							
Arequipa Sanatorium	TB	NPAssn	55	48	..	....	75
March Field,—Riverside							
Station Hospital♦	Gen	Army	150	62	12	272	2,158
Mare Island,—Solano							
U. S. Naval Hospital♦♦	Gen	Navy	800	644	10	651	8,258
Martinez, 7,361—Contra Costa							
Contra Costa County Hosp.	Gen	County	217	192	10	377	4,513
Martinez Community Hosp.	Gen	Corp	50	30	10	402	2,110
Marysville, 6,646—Yuba							
Rideout Memorial Hospital	Gen	Indiv	42	30	8	631	2,429
Yuba County Hospital	Gen	County	100	78	12	108	3,862
McCloud, 2,000—Siskiyou							
McCloud Hospital	Gen	NPAssn	30	12	6	101	649

Key to symbols and abbreviations is on page 1398

CALIFORNIA—Continued

Hospitals and Sanatoriums	Type of Service	Ownership or Control	Beds	Average Census †	Baseinets	Number of Births	Admissions †
Merced, 10,135—Merced							
Merced General Hospital	Gen Tb	County	150	125	20	642	4,471
Mercy Hospital	Gen	Indiv	50	32	22	705	2,149
Modesto, 16,379—Stanislaus							
McPheeters Hospital	Gen	Indiv	41	34	7	320	1,948
Modesto State Hospital	Ment	State	1,253	224	..	...	1,074
Robertson Hospital	Gen	Part	38	30	11	695	1,825
St. Mary's Hospital	Gen	Church	24	17	8	516	1,392
Stanislaus County Hospital	Gen	County	283	98	18	750	3,598
Moffett Field,—Santa Clara							
U. S. Naval Air Station Dispensary	Gen	Navy	66	12	..	...	905
Monrovia, 12,867—Los Angeles							
Norumbega Sanatorium	TB	Indiv	20	14	..	..	22
Pottenger Sanatorium and Clinic	TB	Corp	90	85	..	...	130
Montebello, 8,076—Los Angeles							
Beverly Hospital	Gen	NPAssn	56	38	18	936	2,567
Monterey, 10,084—Monterey							
Monterey Hospital	Gen	Corp	55	39	13	417	2,122
Monterey Park, 8,531—Los Angeles							
Garfield Hospital	Gen	Corp	50	40	12	646	2,079
Murphys, 600—Calaveras							
Bret Harte Sanatorium	TB	Counties	150	125	..	...	222
Napa, 7,746—Napa							
Parke Victory Memorial Hospital	Gen	NPAssn	58	39	10	506	2,060
National City, 10,344—San Diego							
Paradise Valley Sanitarium and Hospital	Gen	Church	134	94	35	848	4,911
Nevada City, 2,445—Nevada							
Miners Hospital	Gen	NPAssn	24	17	6	143	867
Nevada County Hospital	Inst Gen	County	100	70	4	17	496
Newhall, 1,800—Los Angeles							
Wildwood Sanatorium	Unit of Olive View Sanatorium, Olive View						
Newman, 1,214—Stanislaus							
West Side Hospital	Gen	Corp	16	18	3	219	908
Norwalk, 3,000—Los Angeles							
Norwalk State Hospital	Ment	State	2,488	2,477	..	...	1,011
Oakland, 302,163—Alameda							
Alameda County Hospitals							
Arroyo-Del Valle Sanat.	TB	County	276	234	..	...	270
Fairmont Hospital of Alameda County	Gen Tb	County	763	740	..	...	1,130
Highland-Alameda County Hospital	Gen	County	485	366	20	1,359	9,136
Children's Hospital of the East Bay	Chil	NPAssn	76	60	..	...	3,429
East Oakland Hospital	Gen	Corp	80	61	20	1,063	5,080
Peralta Hospital	Gen	NPAssn	156	123	35	2,254	8,520
Permanente Foundation Hospital	Gen	NPAssn	315	233	58	1,886	11,672
Providence Hospital	Gen	Church	235	172	43	2,226	9,127
Samuel Merritt Hospital	Gen	NPAssn	187	160	41	2,548	9,336
U. S. Naval Hospital	Gen	Navy	1,618	1,466	43	1,472	17,326
Veterans Admin. Hospital	Gen	Vet	612	456	..	...	5,461
Oceanside, 4,651—San Diego							
U. S. Naval Hospital	Gen	Navy	300	168	14	188	1,326
Olive View,—Los Angeles							
Olive View Sanatorium	TB	County	1,023	961	..	...	793
Orange, 7,961—Orange							
Orange County General Hospital	Gen	County	305	221	15	221	3,286
St. Joseph Hospital	Gen	Church	115	111	32	1,869	5,701
Oxnard, 8,519—Ventura							
St. John's Hospital	Gen	Church	46	33	15	590	2,469
Palo Alto, 16,774—Santa Clara							
Palo Alto Hospital	Gen	NPAssn	200	109	47	2,266	8,872
Veterans Admin. Hospital	Ment	Vet	1,473	1,407	..	...	939
Pasadena, 81,864—Los Angeles							
Collis P. and Howard Huntington Memorial Hosp.	Gen	NPAssn	242	222	35	2,667	10,249
Las Encinas Sanitarium	N&M	Corp	125	115	..	...	237
McCornack General Hospital	Gen	Army	650	606	13	313	4,824
Pasadena Lutheran Hospital	Gen	Church	65	47	15	691	1,644
St. Luke Hospital	Gen	Church	145	134	45	2,116	6,783
Southern California Sanitarium for Nervous and General Diseases	See Las Encinas Sanitarium						
Woman's Hospital	Mat	NPAssn	19	10	10	419	414
Patton, 4,100—San Bernardino							
Patton State Hospital	Ment	State	4,406	4,387	..	..	1,839
Pittsburg, 9,530—Contra Costa							
Pittsburg Community Hosp.	Gen	City	70	47	16	806	3,027
Placerville, 3,864—Eldorado							
Eldorado County Hospital	Inst Gen	County	64	55	..	...	47
Placerville Sanatorium	Gen	Part	26	17	4	212	1,132
Pomona, 23,535—Los Angeles							
Pomona Valley Community Hospital	Gen	NPAssn	101	70	20	917	3,766
Porterville, 6,270—Tulare							
New Porterville Hospital	Gen	Part	22	20	8	624	1,548
Portola, 2,600—Plumas							
Western Pacific Railway Hospital	Gen	NPAssn	28	15	5	166	794
Quincy, 1,500—Plumas							
Plumas County Hospital	Gen	County	45	30	5	23	361
Red Bluff, 3,824—Tehama							
St. Elizabeth's Mercy Hosp.	Gen	Church	50	45	10	250	900
Redding, 8,100—Shasta							
Shasta County Hospital	Gen	County	54	65	9	47	462

CALIFORNIA—Continued

Hospitals and Sanatoriums	Type of Service	Ownership or Control	Beds	Average Census †	Baseinets	Number of Births	Admissions †
Redlands, 14,324—San Bernardino							
Redlands Community Hosp.	Gen	NPAssn	75	57	20	537	2,778
Redwood City, 12,455—San Mateo							
Canyon Sanatorium	TB	County	75	67	..	...	67
Hassler Health Home	TB	CyCo	202	210	..	...	272
Reedley, 3,170—Fresno							
Reedley Hospital	Gen	NPAssn	30	19	7	443	1,849
Represa, 250—Sacramento							
Folsom Prison Hospital	Inst	State	120	76	..	...	1,041
Richmond, 23,642—Contra Costa							
Permanente Field Hospital	Unit of Permanente Foundation Hospital, Oakland						
Richmond Hospital	Gen	Indiv	70	60	22	1,979	5,006
Riverside, 34,696—Riverside							
Riverside Community Hosp.	Gen	NPAssn	136	101	48	1,480	6,394
Riverside County Hospitals	Gen Tb	County	329	273	14	365	2,966
Sherman Institute Hospital	Inst	IA	58	20	..	...	264
Rosemead, 3,560—Los Angeles							
Alhambra Sanatorium	N&M	Indiv	24	18	.	...	182
Ross, 1,751—Marin							
Ross General Hospital	Gen Tb	Corp	95	83	12	589	2,502
Sacramento, 105,958—Sacramento							
Mercy Hospital	Gen	Church	177	168	35	2,429	7,366
Sacramento County Hosp.	Gen	County	475	412	25	686	9,481
Station Hospital	Gen	Army	68	42	10	156	1,512
Sutter Clinic	Gen	NPAssn	250	189	..	...	7,583
Sutter Maternity Hospital	Mat	NPAssn	72	63	78	3,671	3,794
Salinas, 11,586—Monterey							
El Sausal Sanitarium	Unit of Monterey County Hospital						
Monterey County Hospital	Gen Tb	County	230	189	10	348	2,715
Park Lane Hospital	Gen	Corp	50	33	10	963	3,149
Salinas Valley Hospital	Gen	Indiv	30	23	7	100	750
San Andreas, 1,092—Calaveras							
San Andreas Hospital	Gen	Indiv	12		2		263
San Bernardino, 45,640—San Bernardino							
St. Bernardine Hospitals	Gen	Church	125	115	34	1,511	5,000
San Bernardino County Charity Hospital	Gen	County	341	286	17	445	4,475
San Diego, 205,341—San Diego							
Collier Park Hosp.tal	Mat	Church	19	14	11	65	86
Family Hospital	Gen	Navy	30	24	26	1,049	1,851
Mercy Hospital	Gen	Church	325	291	100	4,972	13,504
Quintard Hospital	Gen	NPAssn	91	86	30	1,548	4,733
San Diego County General Hospital	Gen Tb	County	875	690	13	345	7,855
U. S. Naval Hospital	Gen	Navy	1,500	1,350	54	1,894	22,236
Vaucluin Home	Unit of San Diego County General Hosp.						
San Fernando, 9,094—Los Angeles							
San Fernando Hospital	Gen	Indiv	28	18	8	302	1,346
Veterans Admin. Hospital	TB	Vet	380	361	..	...	332
San Francisco, 634,536—San Francisco							
Children's Hospital	Gen	NPAssn	225	187	60	2,626	7,622
Chinese Hospital	Gen	NPAssn	61	52	9	997	1,443
Doctors Hospital	Gen	Corp	60	40	9	1,295	1,295
Franklin Hospital	Gen	NPAssn	250	224	22	699	7,746
French Hospital	Gen	NPAssn	225	174	18	708	4,915
Greens' Eye Hospital	ENT	Part	35	21	..	...	1,260
Hahnemann Hospital	Gen	NPAssn	79	67	..	...	2,856
Laguna Honda Home	Inst Gen	CyCo	900	776	..	...	720
Langley Porter Clinic Hosp.	Ment	State	70	55	..	...	273
Letterman General Hosp.	Gen	Army	2,442	1,940	13	391	15,998
Mary's Help Hospital	Gen	Church	172	142	58	1,858	6,022
Mount Zion Hospital	Gen	NPAssn	163	140	30	1,179	5,561
Park Sanitarium	N&M	Corp	38	26	..	...	1,157
St. Elizabeth's Infant Hosp.	Mat Ch	Church	85	87	10	117	315
St. Francis Hospital	Gen	NPAssn	300	243	49	1,850	12,155
St. Joseph's Hospital	Gen	Church	225	196	45	2,013	7,936
St. Luke's Hospital	Gen	Church	229	184	25	915	7,625
St. Mary's Hospital	Gen	Church	371	354	69	2,697	11,757
San Francisco Hospital	Gen	Cy\Co	1,300	1,066	50	1,378	18,730
San Francisco Polyclinic	Gen	NPAssn	21	13	..	...	941
San Francisco Psychopathic Hospital	Unit of San Francisco Hospital						
Shriners Hospital for Crippled Children	Orth	NPAssn	50	50	..	...	229
Southern Pacific General Hospital	Indus	NPAssn	450	430	..	...	7,460
Stanford University Hospitals	Gen	NPAssn	355	304	55	2,337	11,246
U. S. Marine Hospital	Gen Tb	USPHS	567	441	..	...	5,630
University of California Hospital	Gen	State	286	227	30	926	8,791
Veterans Admin. Hospital	Gen	Vet	356	311	..	...	9,057
Sanger, 4,017—Fresno							
Sanger Hospital	Gen	Corp	17	14	6	376	976
Sanitarium, 500—Napa							
St. Helena Sanitarium and Hospital	Gen	Church	135	110	9	239	4,239
San Jacinto, 1,256—Riverside							
Soboba Indian Hospital	Gen	IA	34	21	3	51	432
San Jose, 68,457—Santa Clara							
Alum Rock Sanatorium	TB	NPAssn	67	60	..	...	260
O'Connor Hospital	Gen	Church	127	119	35	1,791	6,396
San Jose Hospital	Gen	NPAssn	185	151	45	2,799	8,774
Santa Clara County Hospital	Gen Tb	County	430	367	30	559	6,082
Santa Clara County Sanat.	Unit of Santa Clara County Hospital						
Sunnyhohne Preventorium	Unit of Santa Clara County Hospital						
San Leandro, 14,601—Alameda							
Fairmont Hospital of Alameda County	See Oakland						

Key to symbols and abbreviations is on page 1396

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CALIFORNIA—Continued

Hospitals and Sanatoriums	Type of Service	Ownership or Control	Beds	Average Census †	Bassinets	Number of Births	Admissions †
San Luis Obispo, 8,881—San Luis Obispo							
French Clinic and Hospital	Gen	Indiv	29	20	..	....	1,189
Mountain View Hospital	Gen	Indiv	27	22	9	565	1,727
San Luis Obispo County Tuberculosis Sanatorium	Unit of San Luis Obispo General Hospital						
San Luis Obispo General Hospital	GenTb	County	80	37	12	223	1,836
San Mateo, 19,465—San Mateo							
Community Hospital of San Mateo County◆▲	Gen	County	145	106	13	214	2,602
Mills Memorial Hospital	Gen	Church	160	140	31	1,881	7,969
San Pedro,—Los Angeles							
San Pedro Hospital	Gen	Corp	129	90	26	1,161	4,616
San Quentin, 328—Marin							
Charles L. Neumiller Hosp.▲	Inst	State	186	136	..	....	1,629
San Rafael, 8,575—Marin							
Marin County Hospital and Farm	Chr	County	45	38	..	....	54
San Rafael General Hospital	Gen	Indiv	42	34	17	587	1,339
Santa Barbara, 34,958—Santa Barbara							
St. Francis Hospital	Gen	Church	91	69	19	706	3,585
Santa Barbara Cottage Hospital◆▲◇	Gen	NPAssn	210	168	28	752	6,154
Santa Barbara General Hospital◇	Gen	County	264	205	..	....	1,624
Santa Cruz, 10,456—Santa Cruz							
Santa Cruz County Hospital	Gen	County	165	127	7	62	1,543
Santa Cruz Hospital	Gen	Corp	40	33	15	597	2,467
Sisters Hospital	Gen	Church	28	24	7	307	1,024
Santa Maria, 8,522—Santa Barbara							
Our Lady of Perpetual Help Hospital▲	Gen	Church	50	40	14	636	2,509
Santa Monica, 33,300—Los Angeles							
St. John's Hospital◆▲	Gen	Church	198	106	40	2,324	5,836
Santa Monica Hospital◆▲◇	Gen	Church	178	145	28	1,958	8,717
Santa Rosa, 12,605—Sonoma							
Eliza Tanner Hospital	Gen	Part	20	15	..	....	1,101
Sonoma County Hospital◆▲◇	GenTb	County	455	404	20	546	3,383
Scotia, 2,200—Humboldt							
Scotia Hospital	Gen	NPAssn	45	23	5	302	2,434
Sebastopol, 1,850—Sonoma							
Palm Drive Hospital	Gen	Part	30	17	10	237	1,127
Selma, 3,667—Fresno							
Selma Sanitarium	Gen	Corp	35	29	11	396	2,722
Sonoma, 1,158—Sonoma							
Sonoma Valley Community Hospital	Gen	NPAssn	22	17	4	181	936
Sonora, 2,257—Tuolumne							
Sonora Hospital	Gen	Indiv	20	15	5	76	669
Tuolumne County Hospital	InstGen	County	41	26	3	18	448
South Gate, 26,945—Los Angeles							
Suburban Hospital	Gen	Corp	52	32	29	572	2,143
South Pasadena, 14,256—Los Angeles							
Pasadena Sanitarium	N&M	Indiv	75	47	..	....	439
South San Francisco, 6,627—San Mateo							
South San Francisco Hospital	Gen	Corp	36	19	10	186	936
Spadra, 275—Los Angeles							
Pacific Colony◆	MeDe	State	1,816	1,777	..	....	363
Springville, 665—Tulare							
Tulare-Kings Counties Joint Tuberculosis Hospital◆	TB	Counties	140	116	..	....	120
Stockton, 34,714—San Joaquin							
Dameron Hospital	Gen	NPAssn	82	68	16	1,134	4,373
St. Joseph's Hospital▲	Gen	Church	125	111	22	1,631	5,596
Stockton State Hospital◆	Ment	State	4,240	4,282	..	....	2,288
Susanville, 1,575—Lassen							
Riverside Hospital	Gen	Part	18	13	6	156	959
Talmage, 250—Mendocino							
Mendocino State Hospital◆	Ment	State	3,060	2,802	..	....	800
Tehachapi, 1,264—Kern							
Tehachapi Valley Hospital	Gen	Indiv	16	12	7	163	614
Torrance, 9,950—Los Angeles							
Harbor General Hospital◆	Gen	County	539	426	14	283	2,625
Jared Sidney Torrance Memorial Hospital▲	Gen	NPAssn	42	40	20	1,029	2,544
Trona, 775—San Bernardino							
Trona Hospital	Gen	NPAssn	25	14	8	160	664
Tulare, 5,230—Tulare							
East Tulare Hospital	Mat	Indiv	12	8	12	678	752
Tulare County General Hosp.	Gen	County	103	70	10	371	2,626
Tulare Hospital	Gen	Indiv	24	17	4	29	1,673
Turlock, 4,859—Stanislaus							
Emanuel Hospital	Gen	Church	59	56	18	646	2,259
Lillian Collins Hospital	Gen	Indiv	25	23	4	223	1,121
Ukiah, 3,731—Mendocino							
Ukiah General Hospital	Gen	Part	20	12	6	256	945
Upland, 6,316—San Bernardino							
San Antonio Community Hospital▲	Gen	NPAssn	74	57	20	727	3,437
Vallejo, 20,072—Solano							
Vallejo General Hospital	Gen	Corp	60	53	15	1,332	4,749
U. S. Naval Hospital	See Mare Island						
Van Nuys,—Los Angeles							
Valley Hospital	Gen	Corp	39	32	10	414	1,953
Veterans Admin. Hospital◆▲	Gen	Vet	1,500	1,197	..	....	6,806
Ventura, 13,264—Ventura							
Bard Memorial Hospital	Unit of Ventura County Hospital						
Foster Memorial Hospital▲	Gen	NPAssn	54	44	12	453	2,709
Ventura County Hospital▲	GenTb	County	314	245	14	389	5,469
Veterans Home, 1,865—Napa							
Veterans Home Hospital▲	Inst	State	365	227	..	....	1,846

CALIFORNIA—Continued

Hospitals and Sanatoriums	Type of Service	Ownership or Control	Beds	Average Census †	Bassinets	Number of Births	Admissions †
Visalia, 8,904—Tulare							
Visalia Municipal Hospital	Gen	City	46	41	15	749	2,545
Watsonville, 8,937—Santa Cruz							
Watsonville Hospital	Gen	Corp	46	38	14	683	2,298
Weimar, 125—Placer							
Weimar Joint Sanatorium	TB	Counties	560	491	..	....	596
West Los Angeles,—Los Angeles							
Veterans Admin. Center	See Los Angeles						
Westwood, 5,000—Lassen							
Westwood Hospital	Gen	NPAssn	40	12	5	143	857
Willits, 1,625—Mendocino							
Frank H. Howard Memorial Hospital	Gen	NPAssn	25	16	5	92	765
Woodlake, 1,156—Tulare							
Sequoia Hospital	Gen	Indiv	9	5	4	152	465
Woodland, 6,627—Yolo							
Woodland Clinic Hosp.▲	Gen	Part	67	49	12	504	2,699
Yolo General Hospital	Gen	County	80	50	10	170	1,859
Yosemite National Park, 500—Mariposa							
Lewis Memorial Hospital	Gen	Indiv	13	6	3	33	566
Yreka, 2,485—Siskiyou							
Siskiyou County General Hospital	Gen	County	140	102	14	330	1,799
Yuba City, 4,968—Sutter							
Sutter County Hospital	Gen	County	41	33	4	77	958
Yuba City General Hospital	Gen	Indiv	25	11	10	375	1,539

Related Institutions

Altadena,—Los Angeles							
Pasadena Health School	Conv	NPAssn	34	28	..	....	55
Artesia, 3,891—Los Angeles							
Pioneer Sanitarium	N&M	Indiv	53	51	..	....	28
Avalon, 1,057—Los Angeles							
Santa Catalina Hospital	Gen	Indiv	9	5	3	31	304
Baldwin Park, 16,000—Los Angeles							
Sierra Lodge Sanitarium	N&M	Indiv	62	62	..	....	75
Belmont, 1,225—San Mateo							
Charles S. Howard Foundation	TB Chil	Corp	20	16	..	....	88
Chino, 4,204—San Bernardino							
Hospital of the California Institution for Men◆	Inst	State	22	3	..	....	341
Chula Vista, 3,158—San Diego							
Guest House	N&M	Indiv	30	22	..	....	403
Vista Hill Sanitarium	N&M	Indiv	16	12	..	....	250
Claremont, 3,057—Los Angeles							
Claremont Colleges Infirmary	Inst	NPAssn	24	2	..	....	229
Duarte, 2,000—Los Angeles							
Santa Teresita Sanatorium	TB	Church	117	115	..	....	205
Eureka, 17,055—Humboldt							
Humboldt County Isolation Hospital	Iso	County	16	5	..	....	177
La Crescenta, 3,000—Los Angeles							
Kimball Sanitarium	N&M	Part	35	30	..	....	197
Lakeport, 1,400—Lake							
Lake County General Hospital	InstGen	County	28	18	6	120	540
Lincoln, 2,044—Placer							
Joslin's Sanatorium	N&M	Indiv	12	6	..	....	12
Long Beach, 164,271—Los Angeles							
California Sanitarium	Conv	Indiv	50	50	..	....	250
Los Angeles, 1,504,277—Los Angeles							
Booth Memorial Hospital	Mat	Church	14	9	14	211	234
Chase Diet Sanitarium	Conv	Part	23	23	..	....	40
Florence Crittenton Home	Mat	NPAssn	44	36	16	68	89
Mont St. John of God Sanit.	Conv	Church	32	29	..	....	67
Resthaven	N&M	NPAssn	45	40	..	....	220
St. Anne's Maternity Hosp.▲	Mat	Church	40	8	20	223	257
Twentieth Century Sanitarium	N&M	Indiv	51	51	..	....	18
Monrovia, 12,867—Los Angeles							
Maryknoll Sanatorium	TB	Church	44	41	..	....	61
National City, 10,344—San Diego							
Hillcrest Manor Sanitarium	Chr	Indiv	50	45	..	....	34
Oakland, 302,163—Alameda							
Booth Memorial Hospital	Mat	Church	65	53	38	235	269
Pacoima,—Los Angeles							
Independent Order of Foresters California Tuberculosis Sanitarium	TB	NPAssn	50	19	..	....	71
Rosemead, 5,500—Los Angeles							
Rosemead Lodge	N&M	Indiv	50	25	..	....	246
Ross, 1,751—Marin							
Cedars Development School	MeDe	Corp	75	65	..	....	24
San Diego, 203,341—San Diego							
Fraser Hall Hospital	Conv	Indiv	25	22	..	....	178
San Francisco, 634,536—San Francisco							
Garden Hospital	Incur	NPAssn	97	96	..	....	37
San Gabriel, 11,897—Los Angeles							
Mission Lodge Sanitarium	N&M	Part	68	68	..	....	24
Monterey Sanitarium	N&M	Indiv	70	65	..	....	156
San Marino Sanitarium	N&M	Part	54	51	..	....	31
San Mateo, 19,465—San Mateo							
San Mateo Preventorium	TB	NPAssn	28	20	..	....	19
Santa Monica, 33,300—Los Angeles							
Loansdale Convalescent Hospital and Rest Home	Unit of Santa Monica Hospital						
Sonora, 2,257—Tuolumne							
Columbia Way Hospital	Gen	Indiv	24	5	8	50	245
Stanford University, 726—Santa Clara							
Stanford Convalescent Home	Chil	NPAssn	80	69	..	....	136
Sunland,—Los Angeles							
Sunland Sanatorium	Conv	Corp	48	30	..	....	257

Key to symbols and abbreviations is on page 1390

COLORADO

Hospitals and Sanatoriums	Type of Service	Ownership or Control	Beds	Average Census †	Bassinets	Number of Births	Admissions †
Akron, 1,417—Washington							
Victory Hospital	Gen	County	15	8	5	106	366
Alamosa, 5,613—Alamosa							
Alamosa Community Hosp.	Gen	Church	51	33	21	308	2,760
Boulder, 12,958—Boulder							
Boulder-Colorado Sanitarium and Hospital◆▲○	Gen	Church	101	77	10	349	2,481
Boulder County Hospital	Gen	County	44	23	4	16	404
Community Hospital▲	Gen	NPAssn	50	44	14	443	2,229
Brush, 3,481—Morgan							
Eben-Ezer Hospital	Gen	Church	33	27	12	365	1,479
Burlington, 1,280—Kit Carson							
Kit Carson County Public Hospital	Gen	County	15	9	3	82	367
Camp Carson—El Paso							
Station Hospital	Gen	Army	100	151	4	14	3,156
Canon City, 4,650—Fremont							
Colorado Hospital	Gen	Indiv	28	16	4	82	833
Colorado State Penitentiary Hospital	Inst	State	40	35	..	....	688
St. Thomas More Hospital	Gen	Church	47	45	7	228	1,902
Cheyenne Wells, 426—Cheyenne							
St. Joseph Hospital	Gen	Church	28	7	7	21	155
Climax, 300—Lake							
Climax Molybdenum Company Hospital	Indus	NPAssn	11	4	..	....	326
Colbran, 301—Mesa							
Plateau Valley Congregation Hospital	Gen	Church	13	6	4	45	350
Colorado Springs, 36,789—El Paso							
Colorado Springs Psychopathic Hospital	N&M	Part	150	152	..	....	300
El Paso Contagious and Observation Hospital	Unit of Memorial Hospital						
Glockner-Penrose Hospitals◆	GenTb	Church	198	164	25	854	3,807
Memorial Hospital▲○	Gen	City	80	65	17	532	3,778
St. Francis Hospital and Sanatorium◆▲	GenTb	Church	175	151	12	682	3,255
Union Printers Home and Tuberculosis Sanatorium	GenTb	NPAssn	455	214	..	....	177
Cripple Creek, 2,350—Teller							
Cripple Creek Hospital	Gen	NPAssn	25	7	6	52	378
Del Norte, 1,925—Rio Grande							
St. Joseph's Hospital	Gen	Church	45	38	15	170	1,573
St. Mary's Pavilion	Unit of St. Joseph's Hospital						
Delta, 3,711—Delta							
Delta Memorial Hospital	Gen	NPAssn	16	10	4	68	451
Denver, 322,412—Denver							
Bethesda Sanatorium	TB	Church	48	35	..	....	30
Beth Israel Hospital▲	Gen	NPAssn	55	49	10	201	2,270
Childrens Hospital◆▲○	Chil	NPAssn	190	148	15	....	3,507
Colorado General Hosp.◆▲○	Gen	State	270	218	20	780	4,905
Colorado Psychopathic Hospital◆▲○	Ment	State	80	80	..	....	941
Denver General Hospital◆▲	GenTbCyCo		587	320	36	324	9,982
Ex-Patients' Tubercular Home	TB	NPAssn	50	49	..	....	18
Fitzsimons General Hosp.◆▲	Gen	Army	3,005	2,040	20	731	14,756
Mercy Hospital◆▲○	Gen	Church	250	230	40	1,747	10,573
Mount Airy Sanitarium◆	N&M	Part	70	62	..	....	1,372
National Jewish Hospital◆▲	TB	NPAssn	235	220	..	....	254
Porter Sanitarium and Hospital◆▲○	Gen	Church	150	125	23	978	5,582
Presbyterian Hospital◆▲	Gen	Church	180	175	30	1,875	7,407
Robert W. Speer Memorial Hospital for Children	Unit of Denver General Hospital						
St. Anthony Hospital◆▲○	Gen	Church	210	168	40	1,803	9,439
St. Joseph's Hospital◆▲○	Gen	Church	270	250	61	2,744	11,982
St. Luke's Hospital◆▲○	Gen	Church	271	242	50	1,803	9,444
Station Hospital▲	Gen	Army	300	227	..	....	576
Steele Memorial Hospital	Unit of Denver General Hospital						
Durango, 5,887—La Plata							
La Plata County Hospital	Gen	County	24	11	6	62	366
Mercy Hospital▲	Gen	Church	63	39	12	491	4,705
Edgewater, 1,648—Jefferson							
Craig Colony	TB	NPAssn	47	31	..	....	37
Sands House	TB	NPAssn	39	19	..	....	27
Englewood, 9,686—Arapahoe							
Federal Correctional Inst.	Inst	USPHS	55	5	..	....	161
Swedish National Sanatorium	TB	NPAssn	72	63	..	....	85
Estes Park, 994—Larimer							
Estes Park Hospital	Gen	Indiv	8	1	3	36	177
Flagler, 856—Kit Carson							
Flagler Hospital	Gen	Indiv	12	7	6	102	312
Fort Collins, 12,251—Larimer							
Larimer County Hospital▲	Gen	County	76	59	21	913	3,496
Fort Logan, Arapahoe							
Veterans Admin. Hospital◆▲	Gen	Vet	360	319	..	....	2,805
Fort Lyon, 1,180—Bent							
Veterans Admin. Hospital◆▲	Ment	Vet	981	961	..	....	317
Fort Morgan, 4,984—Morgan							
Fort Morgan Hospital	Gen	Indiv	25	18	8	130	715
Fruita, 1,405—Mesa							
Fruita Community Hospital	Gen	NPAssn	14	5	5	95	516
Glenwood Springs, 2,753—Garfield							
Dr. Porter's Hospital	Gen	Part	19	11	7	190	623
Grand Junction, 12,479—Mesa							
St. Mary's Hospital▲○	Gen	Church	65	65	15	763	3,633
Greeley, 15,995—Weld							
Weld County Public Hosp.▲	Gen	County	107	80	22	956	4,160
Hayden, 640—Routt							
Solandt Memorial Hospital	Gen	NPAssn	16	11	7	173	484
Holyoke, 1,150—Phillips							
Holyoke Hospital	Gen	Indiv	11	6	5	56	364

COLORADO—Continued

Hospitals and Sanatoriums	Type of Service	Ownership or Control	Beds	Average Census †	Bassinets	Number of Births	Admissions †
Ignacio, 855—La Plata							
Edward T. Taylor Indian Hospital	Gen	IA	21	8	4	26	228
Julesburg, 1,619—Sedgwick							
Community Hospital	Gen	NPAssn	12	6	6	110	362
La Junta, 7,998—Otero							
Atchison, Topeka and Santa Fe Railroad Hospital▲	Indus	NPAssn	36	13	..	....	466
Mennonite Hospital and Sanitarium○	Gen	Church	103	76	22	660	2,773
Lamar, 4,445—Prowers							
Sacred Heart Hospital	Gen	Church	34	26	12	330	1,491
Leadville, 4,774—Lake							
St. Vincent's Hospital	Gen	Church	40	20	10	225	875
Longmont, 7,856—Boulder							
Longmont Hosp. and Clinics	Gen	Corp	35	25	10	280	1,472
St. Vrain Hospital	Gen	NPAssn	22	....		Reorganized	
Monte Vista, 3,288—Rio Grande							
Monte Vista Community Hospital	Gen	Church	35	23	10	366	1,423
Montrose, 4,764—Montrose							
St. Luke's Hospital	Gen	Indiv	22	24	11	267	676
Oak Creek, 1,760—Routt							
Oak Creek Hospital	Gen	Indiv	13	6	3	94	271
Ouray, 951—Ouray							
Ouray Hospital	Gen	NPAssn	16	4	4	34	192
Pueblo, 52,162—Pueblo							
Colorado State Hospital◆▲○	Ment	State	4,832	4,613	..	....	965
Corwin Hospital◆▲○	Gen	NPAssn	206	156	21	875	5,825
Parkview Hospital▲	Gen	NPAssn	100	68	20	527	2,531
St. Mary Hospital▲○	Gen	Church	146	102	28	614	3,924
Woodcroft Hospital▲	N&M	Corp	130	68	..	....	170
Rocky Ford, 5,494—Otero							
Physicians Hospital	Gen	NPAssn	13	10	5	148	882
Salida, 4,969—Chaffee							
Denver and Rio Grande Western Railroad Hospital▲	Gen	NPAssn	85	64	7	175	2,323
Spivak, 350—Jefferson							
Sanatorium of the Jewish Consumptives' Relief Society◆▲	TB	NPAssn	300	209	..	....	115
Sterling, 7,411—Logan							
Good Samaritan Hospital	Gen	Church	32	22	9	316	1,452
St. Benedict Hospital	Gen	Church	32	26	11	330	1,767
Trinidad, 13,223—Las Animas							
Mount San Rafael Hosp.▲○	Gen	Church	70	45	12	497	1,951
Walsenburg, 3,855—Huerfano							
Lamme Hospital	Gen	Indiv	20	9	5	115	326
Wheat Ridge, 1,350—Jefferson							
Evangelical Lutheran Sanat.▲	TB	Church	110	85	..	....	63
Wray, 2,661—Yuma							
Wray Community Hospital	Gen	Corp	16	5	8	160	367

Related Institutions

Aspen, 777—Pitkin							
Pitkin County Public Hosp.	Gen	County	16	2	4	9	35
Boulder, 12,958—Boulder							
Mesa Vista Sanatorium	TB	Part	40	34	..	....	46
Colorado Springs, 36,789—El Paso							
Cragmor Sanatorium	TB	NPAssn	125	60	..	....	87
Denver, 322,412—Denver							
Booth Memorial Hospital	Mat	Church	8	5	10	163	112
Florence Crittenton Home and Hospital	Mat	NPAssn	77	47	9	118	135
St. Francis Sanatorium	TB	Church	27	20	..	....	30
Englewood, 9,686—Arapahoe							
Costello Home	TB	NPAssn	14	7	..	....	7
Temple Rest Home	Conv	Indiv	28	23	..	....	74
Golden, 3,175—Jefferson							
Hospital—State Industrial School Boys	Inst	State	25	4	..	....	169
Grand Junction, 12,479—Mesa							
State Home and Training School for Mental Defectives	MrDe	State	300	456	..	....	27
Homelake, 225—Rio Grande							
Colorado State Soldiers and Sailors Home	Inst	State	35	12	..	....	56
Ridge, 100—Jefferson							
State Home and Training School for Mental Defectives	MrDe	State	345	340	..	....	10

CONNECTICUT

Hospitals and Sanatoriums	Type of Service	Ownership or Control	Beds	Average Census †	Bassinets	Number of Births	Admissions †
Bridgeport, 147,121—Fairfield							
Bridgeport Hospital◆▲○	Gen	NPAssn	387	340	74	2,491	12,585
Englewood Hospital	IsoTb	City	150	11	..	....	241
Park City Hospital	Gen	NPAssn	33	24	..	....	986
St. Vincent's Hospital▲○	Gen	Church	342	262	80	3,176	11,605
Bristol, 30,867—Hartford							
Bristol Hospital◆▲	Gen	NPAssn	130	112	30	894	5,116
Canaan, 555—Litchfield							
Robert C. Geer Memorial Hospital	Gen	NPAssn	32	21	7	90	862
Cromwell, 3,281—Middlesex							
Cromwell Hall	Nerv	Corp	33	16	..	....	60
Danbury, 22,339—Fairfield							
Danbury Hospital◆▲○	Gen	NPAssn	180	136	40	1,175	5,282
Federal Correctional Institution	Inst	USPHS	35	22	..	....	563
Derby, 10,987—New Haven							
Griffin Hospital▲	Gen	NPAssn	94	80	24	1,109	5,861

Key to symbols and abbreviations is on page 1396

CONNECTICUT—Continued

Hospitals and Sanatoriums	Type of Service	Ownership or Control	Beds	Average Census †	Bassinets	Number of Births	Admissions †
Greens Farms, 375—Fairfield							
Hall-Brooke Sanitarium	N&M	Corp	50	32	..	...	187
Greenwich, 6,000—Fairfield							
Blythewood	N&M	Corp	70	57	..	...	219
Greenwich Hospital△○	Gen	NPAssn	129	110	23	583	4,619
St. Luke's Convalescent Hospital	ChlConv	NPAssn	110	78	..	...	952
Hartford, 166,267—Hartford							
Avery Convalescent Hospital	Unit of Hartford Hospital						
Cedarcrest Sanatorium△	TB	State	243	232	..	...	216
Hartford Hospital○△○	Gen	NPAssn	746	607	170	6,264	23,855
Institute of Living (Neuro-Psychiatric Institute of the Hartford Retreat)○△	N&M	NPAssn	400	403	..	...	946
J. J. McCook Memorial Hospital○△○	GenIso	City	266	199	6	80	4,310
Mount Sinai Hospital△	Gen	NPAssn	55	42	..	...	1,264
St. Francis Hospital○△○	Gen	Church	551	470	126	2,284	20,259
Kent, 1,245—Litchfield							
Kent School Infirmary	Inst	NPAssn	27	3	..	...	122
Lakeville, 1,800—Litchfield							
Hotchkiss School Infirmary	Inst	NPAssn	36	5	..	...	498
Manchester, 25,700—Hartford							
Manchester Memorial Hosp.△	Gen	NPAssn	127	116	20	671	4,181
Meriden, 29,484—New Haven							
Meriden Hospital△○	Gen	NPAssn	146	124	30	1,331	5,373
Undercliff Sanatorium○△	TB	State	343	198	..	...	194
Middletown, 26,495—Middlesex							
Connecticut State Hosp.○△○	Ment	State	3,122	3,019	..	...	992
Middlesex Hospital△○	Gen	NPAssn	146	109	27	1,264	4,906
Milford, 16,430—New Haven							
Milford Hospital	Gen	NPAssn	50	33	15	454	1,454
New Britain, 68,495—Hartford							
New Britain General Hospital○△○	Gen	NPAssn	226	185	38	2,218	7,782
New Haven, 160,605—New Haven							
Grace-New Haven Community Hospital							
Grace Unit○△○	Gen	NPAssn	230	155	40	1,502	6,573
New Haven Unit○△○	Gen	NPAssn	541	437	57	2,147	12,710
Hospital of St. Raphael○△○	Gen	Church	370	288	60	2,530	10,738
Psychiatric Clinic, Yale School of Medicine	Unit of Grace-New Haven Com. Hospital						
Sarah Wey Thompkins Memorial Pavilion	Unit of Grace-New Haven Com. Hospital						
Newington, 5,445—Hartford							
Newington Home for Crippled Children○△	Orth	NPAssn	175	114	..	...	221
Veterans Admin. Hospital△	Gen	Vet	387	316	..	...	5,473
New London, 30,456—New London							
Lawrence and Memorial Associated Hospitals○△○	Gen	NPAssn	249	177	81	1,866	6,445
Dr. Lena's Surgical Hospital	Surg	Indiv	26	16	..	...	826
U. S. Coast Guard Academy Hospital△	Gen	USPHS	34	9	..	...	372
New Milford, 3,600—Litchfield							
New Milford Hospital	Gen	NPAssn	30	16	6	156	750
Newtown, 603—Fairfield							
Fairfield State Hospital○△○	Ment	State	2,540	2,467	..	...	819
Norwalk, 38,849—Fairfield							
Norwalk Hospital○△○	Gen	NPAssn	241	169	44	1,366	7,507
Norwich, 29,650—New London							
Norwich State Hospital○△	Ment	State	2,600	2,632	..	...	811
Norwich State Tuberculosis Sanatorium△	TB	State	402	355	..	...	302
William W. Backus Hosp.△○	Gen	NPAssn	125	123	30	1,373	6,111
Portland, 7,550—Middlesex							
Elmcrest Manor	N&M	Indiv	42	40	..	...	249
Putnam, 7,775—Windham							
Day Kimball Hospital△	Gen	NPAssn	80	66	18	670	2,621
Rockville, 7,572—Tolland							
Rockville City Hospital	Gen	NPAssn	51	35	14	195	1,198
Sharon, 500—Litchfield							
Sharon Hospital△	Gen	NPAssn	40	25	12	266	1,257
Shelton, 10,971—Fairfield							
Laurel Heights State Tuberculosis Sanatorium○△	TB	State	261	250	..	...	218
Southbury, 1,100—New Haven							
Southbury Training School	MeDe	State	1,460	1,302	..	...	79
Southington, 5,000—Hartford							
Bradley Memorial Hospital	Gen	NPAssn	35	19	..	...	909
Stafford Springs, 3,401—Tolland							
Cyril and Julia C. Johnson Memorial Hospital△	Gen	NPAssn	50	37	12	336	1,570
Stamford, 47,928—Fairfield							
Dr. Barnes Sanitarium	N&M	Corp	50	34	..	...	190
St. Joseph Hospital△	Gen	Church	90	73	30	964	3,566
Stamford Hall	N&M	Corp	175	171	..	...	352
Stamford Hospital○△○	Gen	NPAssn	248	160	27	865	6,661
Tophasere Grange	N&M	Corp	16	7	..	...	...
Torrington, 26,986—Litchfield							
Charlotte Hungerford Hosp.△	Gen	NPAssn	133	92	27	801	3,854
Wallingford, 11,425—New Haven							
Gaylord Farm Sanatorium○	TB	NPAssn	144	131	..	...	167
Waterbury, 99,314—New Haven							
St. Mary's Hospital○△○	Gen	Church	327	228	57	1,773	9,578
Waterbury Hospital○△○	Gen	NPAssn	310	241	68	2,019	11,626
Waterford, 100—New London							
The Seaside	ThChll	State	145	110	..	...	22
Westport, 8,258—Fairfield							
Westport Sanitarium	N&M	Corp	100	67	..	...	253

CONNECTICUT—Continued

Hospitals and Sanatoriums	Type of Service	Ownership or Control	Beds	Average Census †	Bassinets	Number of Births	Admissions †
Willimantic, 12,101—Windham							
Windham Community Memorial Hospital△	Gen	NPAssn	96	66	22	588	3,024
Winsted, 7,674—Litchfield							
Litchfield County Hospital△	Gen	NPAssn	71	60	16	353	1,867
Related Institutions							
Bridgeport, 147,121—Fairfield							
Hillside House and Hospital	Chr	City	275	248	..	...	431
East Lyme, 3,338—New London							
Ida Thompson Hospital	Unit of Connecticut State Farm for Women, Niantic						
Greenwich, 6,000—Fairfield							
Nathaniel Witherell Hospital	Chr	City	72	43	..	...	136
Mansfield Depot, 300—Tolland							
Mansfield State Training School and Hospital	MeDe	State	1,223	1,135	..	...	48
Meriden, 29,484—New Haven							
Connecticut School for Boys	Inst	State	37	7	..	...	243
New Canaan, 6,221—Fairfield							
Silver Hill Foundation○	N&M	NPAssn	46	29	..	...	242
New Haven, 160,605—New Haven							
Jewish Home for the Aged	Inst	NPAssn	92	90	..	...	20
Yale Infirmary	Inst	NPAssn	40	9	..	...	1,046
Niantic, 1,312—New London							
Connecticut State Farm for Women	Inst	State	243	51	9	40	212
Rocky Hill, 2,679—Hartford							
State Veterans Hospital	Inst	State	284	197	..	...	2,525
Waterbury, 99,314—New Haven							
Connecticut Children's Hosp.	MeDe	NPAssn	125	120	..	...	119
West Hartford, 23,776—Hartford							
St. Agnes Home	Mat	Church	140	32	6	95	96
West Suffield, 700—Hartford							
Travelers Rest House	Conv	NPAssn	40	11	..	...	79
Wethersfield, 9,646—Hartford							
Connecticut State Prison Hospital	Inst	State	30	14	..	...	205

DELAWARE

Hospitals and Sanatoriums	Type of Service	Ownership or Control	Beds	Average Census †	Bassinets	Number of Births	Admissions †
Dover, 3,317—Kent							
Kent General Hospital△	Gen	NPAssn	60	58	10	504	2,668
Farnhurst, 300—New Castle							
Delaware State Hospital○△○	Ment	State	1,250	1,230	..	...	350
Lewes, 2,246—Sussex							
Beebe Hospital△	Gen	NPAssn	104	50	17	350	2,580
Marshallton, 1,300—New Castle							
Brandywine Sanatorium	TB	State	130	113	..	...	108
Edgewood Sanatorium	TB	State	60	42	..	...	57
Milford, 4,214—Sussex							
Milford Memorial Hospital△	Gen	NPAssn	100	72	19	694	3,033
Smyrna, 1,870—Kent							
Delaware State Welfare Home Hospital	InstChr	StateCo	378	365	7	2	265
Wilmington, 112,504—New Castle							
Alfred I. duPont Institute of The Nemours Foundation○△	OrthChll	NPAssn	85	48	..	...	156
Delaware Hospital○△○	Gen	NPAssn	370	307	64	1,907	9,404
Doris Memorial Hospital	Unit of Wilmington General Hospital						
Gross Private Hospital	Gen	Corp	15	7	6	60	230
Memorial Hospital○△○	Gen	NPAssn	230	161	58	1,179	5,636
St. Francis Hospital△○	Gen	Church	105	71	32	442	2,939
Veterans Admin. Hospital	Gen	Vet	150	149	..	...	1,758
Wilmington General Hosp.○△	Gen	NPAssn	172	167	52	1,660	4,966
Related Institutions							
Marshallton, 1,300—New Castle							
Sunnybrook Cottage Preventorium	ThChll	NPAssn	24	20	..	...	12
Storkley, 68—Sussex							
Delaware Colony	MeDe	State	507	483	..	...	26

DISTRICT OF COLUMBIA

Hospitals and Sanatoriums	Type of Service	Ownership or Control	Beds	Average Census †	Bassinets	Number of Births	Admissions †
Washington, 756,000							
Adams' Hospital	Gen	Indiv	23	14	8	64	363
Central Dispensary and Emergency Hospital○△○	Gen	NPAssn	310	240	..	...	7,891
Children's Hospital△○	Chil	NPAssn	292	160	..	...	7,771
Columbia Hospital for Women and Lying-In Asylum○△	MatGyn	NPAssn	135	100	16	5,882	5,621
Doctors Hospital○△	Gen	Corp	240	213	61	2,020	8,771
Eastern Dispensary and Casualty Hospital△	Gen	NPAssn	150	97	..	...	5,557
Episcopal Eye, Ear and Throat Hospital△	ENT	Church	100	66	..	...	6,947
Freedmen's Hospital○△○	GenTb	Fed	458	400	54	1,710	7,602
Gallinger Municipal Hosp.○△○	Gen	City	1,407	970	170	4,722	21,116
Garfield Memorial Hosp.○△○	Gen	NPAssn	373	353	104	3,202	11,464
Georgetown University Hospital○△○	Gen	NPAssn	340	191	103	1,956	6,844

Key to symbols and abbreviations is on page 1398

DISTRICT OF COLUMBIA—Continued

Hospitals and Sanatoriums	Type of Service	Ownership or Control	Beds	Average Census †	Bassinets	Number of Births	Admissions †
George Washington University Hospital●◆▲	Gen	NPAssn	400	75	22	919	3,661
National Homeopathic Hosp.▲	Gen	NPAssn	62	43	23	628	2,545
Providence Hosp.tal●◆▲○	Gen	Church	340	250	60	3,421	12,315
Saint Elizabeths Hosp.●◆▲○	Ment Gen	Fed	6,557	6,160	..	9	1,278
Sibley Memorial Hosp.●◆▲○	Gen	Church	256	217	78	3,328	11,588
Station Hospital	Gen	Army	133	80	18	513	3,136
Tuberculosis Sanatorium●▲ (Glenn Dale Sanatorium, Glendale, Md. P.O.)	TB	City	532	507	..	...	500
U. S. Soldiers' Home Hospital▲	Instlen	Fed	379	328	..	...	1,501
Veterans Admin. Hospital●▲	Gen	Vet	335	295	..	...	3,565
Walter Reed General Hospital●◆▲	Gen	Army	2,400	1,897	33	1,110	12,451
Washington Sanitarium and Hospital●▲○	Gen	Church	188	179	29	917	3,992

Related Institutions

Washington, 786,000							
District Training School (Laurel, Md. P.O.)	Me De	City	672	600	6	...	42
Florence Crittenton Home	Mat	NPAssn	56	10	36	158	165
Home for the Aged and Infirm	Inst	City	150	116	..	...	150
Kendall House Sanitarium	Conv	Indiv	22	15	..	...	22
National Training School for Boys Hospital	Inst	Fed	30	8	..	...	800
Washington Home for Incurables	Incur	NPAssn	172	172	..	...	39

FLORIDA

Hospitals and Sanatoriums	Type of Service	Ownership or Control	Beds	Average Census †	Bassinets	Number of Births	Admissions †
Avon Park, 3,125—Highlands							
Walker Memorial Sanitarium and Hospital	Gen	Church	82	...	6	Estab. 1948	
Bartow, 6,158—Polk							
Bartow General Hospital	Gen	City	30	16	12	301	1,553
Polk County Hospital	Gen	County	69	41	6	15	199
Bay Pines,—Pinellas							
Veterans Admin. Hospital▲	Gen	Vet	440	406	..	...	3,770
Bradenton, 7,444—Manatee							
Bradenton General Hospital	Gen	Part	27	20	10	204	929
Century, 2,600—Escambia							
Turberville Hospital▲	Gen	NPAssn	35	20	5	173	1,151
Chattahoochee, 7,119—Gadsden							
Florida State Hospital▲○	Ment	State	5,615	5,402	..	...	2,003
Clearwater, 10,136—Pinellas							
Morton F. Plant Hospital▲	Gen	NPAssn	75	43	15	444	2,425
Coral Gables, 8,284—Dade							
Coral Gables Hospital	Gen	Corp	45	...	15	Estab. 1947	
Veterans Admin. Hospital●	Gen	Vet	250	200	..	...	4,025
Dade City, 2,561—Pasco							
Jackson Memorial Hospital	Gen	County	20	9	10	240	619
Daytona Beach, 22,384—Volusia							
Halifax District Hospital	Gen	NPAssn	140	83	35	666	3,722
De Funiak Springs, 2,576—Walton							
Lakeside Clinic Hospital	Gen	Part	14	8	10	337	436
De Land, 7,641—Volusia							
De Land Memorial Hospital	Gen	NPAssn	93	14	9	294	1,316
Dunedin, 1,758—Pinellas							
Mease Hospital	Gen	NPAssn	25	12	4	86	859
Eglin Field,—Okaloosa							
Station Hospital	Gen	Army	150	90	25	350	3,500
Eustis, 2,959—Lake							
Lake County Medical Center	Gen	NPAssn	71	33	12	357	1,888
Fort Lauderdale, 17,956—Broward							
Broward General Hospital	Gen	City	120	81	41	708	3,691
Fort Myers, 10,604—Lee							
Jones-Walker Hospital	Unit of Lee Memorial Hospital						
Lee Memorial Hospital	Gen	NPAssn	40	37	10	457	1,949
Fort Pierce, 8,040—St. Lucie							
Fort Pierce Memorial Hosp.	Gen	NPAssn	50	28	12	435	1,430
Gainesville, 12,737—Alachua							
Alachua County Hospital○	Gen	County	116	83	30	1,045	3,947
University of Florida Infirmary	Inst	State	53	9	..	...	1,255
Hollywood, 6,726—Broward							
Hollywood Hospital	Gen	Corp	30	18	8	173	1,107
Homestead, 3,154—Dade							
James Archer Smith Hospital	Gen	NPAssn	18	10	8	151	680
Jacksonville, 173,065—Duval							
Brewster Hospital▲	Gen	Church	105	65	25	1,042	2,701
Duval County Hospital●◆▲	Gen	County	225	138	15	560	3,657
Hazelhurst Sanatorium	TB	NPAssn	30	25	..	...	42
Hope Haven Hospital●	Orth	NPAssn	100	60	..	...	463
Negro Tuberculosis Hospital	TB	City	48	35	..	...	42
Riverside Hospital▲○	Gen	NPAssn	50	43	12	173	1,817
St. Luke's Hospital●◆▲○	Gen	NPAssn	180	150	30	1,710	7,473
St. Vincent's Hospital●◆▲○	Gen	Church	228	62	32	3,226	13,545
U. S. Naval Air Station Dispensary	Gen	Navy	158	20	..	...	2,144
U. S. Naval Hospital●◆▲	Gen	Navy	550	493	40	836	6,727
Key West, 12,927—Monroe							
Key West Municipal Hospital	Gen	City	56	20	17	185	953
U. S. Naval Hospital	Gen	Navy	150	114	17	306	1,950
Kissimmee, 3,225—Osceola							
Osceola Hospital	Gen	Indiv	50	30	10	119	1,092

FLORIDA—Continued

Hospitals and Sanatoriums	Type of Service	Ownership or Control	Beds	Average Census †	Bassinets	Number of Births	Admissions †
Lake City, 5,836—Columbia							
Lake Shore Hospital	Gen	City	47	40	24	431	2,378
Veterans Admin. Hospital▲	Gen	Vet	379	312	..	...	4,597
Lakeland, 22,068—Polk							
Morrell Memorial Hospital▲	Gen	City	110	78	14	696	3,635
Lake Wales, 5,024—Polk							
Lake Wales Hospital▲	Gen	NPAssn	31	19	14	197	963
Leesburg, 4,687—Lake							
Durham Young Hospital	Gen	Indiv	28	...	8	Estab. 1947	
Stevens Clinic Hospital	Gen	Indiv	18	...	11	Estab. 1947	
Manatee, 3,595—Manatee							
Riverside Hospital	Gen	Indiv	20	9	4	27	395
Marianna, 5,679—Jackson							
Jackson Hospital	Gen	NPAssn	62	53	14	384	2,429
Northwest Florida State Sanatorium	TB	State	206	124	..	...	419
Melbourne, 2,622—Brevard							
Brevard Hospital	Gen	NPAssn	30	14	5	141	519
Florida Rapid Treatment Center	Ven	State	380	...	..	Estab. 1947	
Miami, 172,172—Dade							
Biscayne Hospital	Gen	Corp	40	10	3	96	553
Christian Hospital	Gen	NPAssn	30	15	15	598	829
Dade County Hospital	Gen Tb	County	174	102	16	500	3,136
Jackson Memorial Hosp.●◆▲○	Gen	City	534	443	70	3,662	18,387
Miami Medical Center	N & M	Indiv	35	26	..	...	432
Miami Retreat Sanatorium	N & M	NPAssn	85	57	..	...	1,273
Miami Riverside Hospital	Gen	Corp	44	28	10	140	680
National Children's Cardiac Home	Card	NPAssn	62	35	..	...	61
Sun-Ray Park Health Resort	Conv	Corp	75	47	..	...	677
Victoria Hospital	Gen	Indiv	57	39	22	679	2,756
Miami Beach, 28,012—Dade							
Alton Road Hospital	Gen	NPAssn	50	...	..	Estab. 1947	
St. Francis Hospital●▲	Gen	Church	175	102	49	720	4,254
Miami Springs, 808—Dade							
Miami-Battle Creek Sanit.	Gen	NPAssn	115	...	..	Reopened	
Ocala, 8,986—Marion							
Munroe Memorial Hospital	Gen	CyCo	74	51	15	521	3,061
Ona Locka, 1,855—Dade							
North Dade Hospital	Gen	Corp	250	...	20	Estab. 1947	
Orlando, 36,736—Orange							
Florida Sanitarium and Hospital○	Gen	Church	115	125	25	378	2,762
Florida State Tuberculosis Sanatorium○	TB	State	240	235	..	...	436
Orange Memorial Hospital●▲○	Gen	NPAssn	233	194	30	1,274	7,076
Station Hospital▲	Gen	Army	50	25	6	164	1,303
Palatka, 7,140—Putnam							
Glendale Hospital	Gen	Indiv	25	No data supplied			
Mary Lawson Sanitarium	Gen	Indiv	50	12	11	138	591
Panama City, 11,610—Bay							
Fraser Clinic Hospital	Gen	Indiv	10	5	5	150	778
Liesnby Hospital	Gen	Indiv	31	15	10	276	917
Panama City Hospital	Gen	NPAssn	27	15	10	489	1,576
Station Hospital	Gen	Army	50	31	15	199	1,271
Pensacola, 37,449—Escambia							
Pensacola Hospital▲○	Gen	Church	175	170	70	817	7,047
Pensacola Maternity Hospital	Mat	NPAssn	33	30	28	1,087	1,274
U. S. Naval Hospital▲●◆	Gen	Navy	350	255	39	795	4,857
Plant City, 7,491—Hillsborough							
Dr. T. C. Maguire's Hosp.	Gen	Indiv	15	8	9	141	478
Quincy, 3,888—Gadsden							
Gadsden County Hospital	Gen	NPAssn	30	28	6	206	1,176
Rockledge, 725—Brevard							
Eugene Wuesthoff Memorial Hospital	Gen	NPAssn	20	8	8	96	401
St. Augustine, 17,400—St. Johns							
East Coast Hospital▲	Gen	NPAssn	55	50	5	186	1,927
Flagler Hospital▲	Gen	NPAssn	65	40	16	300	1,861
St. Petersburg, 60,812—Pinellas							
American Legion Hospital for Crippled Children	Orth	NPAssn	25	21	..	...	374
Mound Park Hospital▲○	Gen	City	150	137	25	737	5,676
St. Anthony's Hospital▲	Gen	Church	138	100	30	580	3,650
St. Anthony's Villa	Unit of St. Anthony's Hospital						
Sanford, 10,217—Seminole							
Fernald-Laughton Memorial Hospital	Gen	NPAssn	60	21	15	434	1,241
Sarasota, 11,141—Sarasota							
Joseph Halton Hospital	Gen	Indiv	10	8	2	8	590
Sarasota Hospital	Gen	City	74	46	12	408	2,109
Sebring, 3,155—Highlands							
Sebring General Hospital	Gen	Indiv	25	10	7	68	704
Weems Hospital	Gen	Indiv	22	13	6	159	876
Starke, 2,130—Bradford							
Shadyerest Hospital	Gen	Corp	50	...	10	Estab. 1947	
Stuart, 2,438—Martin							
Martin County Hospital	Gen	NPAssn	30	9	8	123	486
Tallahassee, 16,240—Leon							
Federal Correctional Institution	Inst	USPHS	30	11	..	...	291
Forsyth Memorial Sanitarium and Hospital	Gen	Church	44	...	11	Estab. 1947	
Tallahassee Memorial Hosp.	Gen	City	75	...	28	Estab. 1948	
Tampa, 108,391—Hillsborough							
Centro Asturiano Hospital	Gen	NPAssn	80	72	16	341	2,639
Clara Frye Tampa Municipal Negro Hospital▲	Gen	City	66	45	6	184	2,581
Hillsborough County Home and Hospital	Gen	County	257	197	12	274	4,472
St. Joseph's Hospital▲	Gen	Church	108	97	32	1,307	5,694
Southwest Florida State Tuberculosis Sanatorium	TB	State	375	360	..	...	619

Key to symbols and abbreviations is on page 1398

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FLORIDA—Continued

Hospitals and Sanatoriums	Type of Service	Ownership or Control	Beds	Average Census †	Bassinets	Number of Births	Admissions †
Station Hospital♣	Gen	Army	150	99	24	362	2,233
Tampa Municipal Hospital♣♦	Gen	City	302	235	39	1,704	10,491
Tarpon Springs, 3,402—Pinellas							
Tarpon Springs Municipal Hospital	Gen	City	14	....	5	Estab. 1947	
Umatilla, 1,146—Lake							
Harry-Anna Crippled Children's Home	Orth	NPAssn	75	55	..	....	77
Vero Beach, 3,650—Indian River							
Indian River Hospital	Gen	NPAssn	36	12	12	302	794
West Palm Beach, 33,695—Palm Beach							
Good Samaritan Hospital♣♦	Gen	NPAssn	123	86	22	592	3,835
St. Mary's Hospital♣	Gen	Church	300	65	15	615	2,5 9
Winter Haven, 6,196—Polk							
Winter Haven Hospital	Gen	NPAssn	67	32	18	447	1,982
Related Institutions							
Fernandina, 3,492—Nassau							
Nassau County Hospital	Gen	County	30	7	8	174	739
Fort Lauderdale, 17,596—Broward							
Provident Hospital	Gen	NPAssn	42	20	10	182	809
Gainesville, 13,757—Alachua							
Florida Farm Colony	MeDe	State	550	477	..	....	53
Gulfport, 2,445—Pinellas							
Cedars Hospital	Gen	Indiv	36	19	..	....	166
Jacksonville, 173,065—Duval							
Dr. Miller's Sanitarium	Drug	Indiv	20	8	..	....	546
Largo, 1,661—Pinellas							
Pinellas County Home and Hospital	InstTB	County	152	49	..	....	55
Miami, 172,172—Dade							
Edgewater Hospital	Gen	Indiv	41	26	12	318	1,957
Orlando, 36,736—Orange							
Holiday House Nursing Home	Conv	Part	16	11	..	....	56
St. Petersburg, 60,812—Pinellas							
Earle Restorium	Conv	Indiv	35	22	..	....	102
Florence Crittenton Home	Mat	NPAssn	22	17	12	50	55
Woman's Hospital	Gen	Indiv	24	....	12	Estab. 1947	
Tallahassee, 16,240—Leon							
Florida Agricultural and Mechanical College Hospital♣	Gen	State	26	20	6	96	1,021
Wauchula, 2,710—Hardee							
Wauchula Infirmary	Gen	Indiv	16	10	5	180	1,080

GEORGIA

Hospitals and Sanatoriums							
Albany, 19,665—Dougherty							
Phoebe Putney Memorial Hospital♣	Gen	CyCo	116	66	40	835	4,046
Alto, 217—Habersham							
Alto Medical Center♣♦	Ven	State	816	411	16	16	13,706
American, 9,261—Sumter							
American and Sumter County Hospital	Gen	NPAssn	62	33	12	278	1,642
Athens, 30,650—Clarke							
Athens General Hospital♣	Gen	County	84	62	14	290	3,049
St. Mary's Hospital♣	Gen	Church	102	68	16	774	3,928
Atlanta, 302,288—Fulton							
Albert Steiner Clinic for Cancer and Allied Diseases♦	Unit of Grady Memorial Hospital						
Blackman Wallace Sanatorium	Gen	Part	25	24	..	....	910
Contagious Disease Hospital	Unit of Grady Memorial Hospital						
Crawford W. Long Memorial Hospital♣♦	Gen	NPAssn	329	300	120	5,551	16,605
Georgia Baptist Hosp.♣♦	Gen	Church	194	169	90	850	6,9 6
Grady Memorial Hosp.♣♦	Gen	Counties	810	465	90	4,320	15,957
Grady Memorial Hosp., Emory University Division	Unit of Grady Memorial Hospital						
Henrietta Egleston Hospital for Children♣♦	Chil	NPAssn	40	33	4	....	1,104
Jesse Parker Williams Hosp.	Gen	NPAssn	66	66	..	....	2,163
Joseph B. Whitehead Memorial Hospital	Inst	State	28	6	..	....	2,866
Piedmont Hospital♣♦	Gen	NPAssn	132	122	18	1,092	5,087
Pearce de Leon Eye, Ear and Throat Infirmary♦	EST	Indiv	25	21	..	....	2,337
St. Joseph's Infirmary♣♦	Gen	Church	140	135	37	1,443	6,647
Station Hospital♣	Gen	Army	607	125	20	253	3,373
U. S. Penitentiary Hospital♣	Inst	USPHS	172	67	..	....	900
Veterans Admin. Hospital♣	TB	Vet	225	209	..	....	2,324
William A. Harris Memorial Hospital	Gen	Corp	28	27	8	86	772
Augusta, 65,925—Richmond							
Oliver General Hosp.♣♦	Gen	Army	2,600	2,113	12	266	8,403
University Hospital♣♦	GenTbCity		466	410	56	2,164	14,332
Veterans Admin. Hospital♣	Ment	Vet	1,225	1,074	..	....	1,131
Willenford Hospital	Unit of University Hospital						
Bainbridge, 6,252—Decatur							
Bainbridge Hospital	Gen	Part	32	7	6	237	517
Riverside Hospital	Gen	Part	34	17	8	170	697
Blakely, 2,774—Early							
S. P. Holland Hospital	Gen	Indiv	10	2	2	124	816
Blue Ridge, 1,380—Fannin							
Burdine Hospital	Gen	Part	12	9	6	366	745
Brunswick, 15,025—Glynn							
City Hospital	Gen	City	100	43	20	620	3,667
Butler, 1,696—Taylor							
Montgomery Hospital	Gen	Indiv	22	11	8	151	905

GEORGIA—Continued

Hospitals and Sanatoriums	Type of Service	Ownership or Control	Beds	Average Census †	Bassinets	Number of Births	Admissions †
Cairo, 4,653—Grady							
Grady County Hospital	Gen	County	18	8	5	217	539
Calhoun, 2,305—Gordon							
Johnson-Hall Hospital	Gen	Indiv	24	12	3	394	675
Canton, 2,651—Cherokee							
Cokers' Hospital	Gen	Indiv	50	27	5	292	1,632
Cartersville, 6,141—Bartow							
Wofford-Stanford Hospital	Gen	Part	12	4	3	196	402
Cedartown, 9,025—Polk							
Polk General Hospital	Gen	NPAssn	31	....	12	Estab. 1947	
Chamblee, 1,081—De Kalb							
Veterans Admin. Hospital♣♦	Gen	Vet	550	540	..	....	6,161
Columbus, 53,280—Muscogee							
Columbus City Hospital♣♦	Gen	City	300	188	36	2,054	9,580
Cuthbert, 3,447—Randolph							
Patterson Hospital♣	Gen	Part	30	....	10	Reopened	
Dalton, 10,408—Whitfield							
Hamilton Memorial Hospital	Gen	NPAssn	52	44	15	1,030	3,200
Decatur, 16,761—De Kalb							
Scottish Rite Hospital for Crippled Children♦♣	Orth	NPAssn	64	44	..	....	311
Donalsonville, 1,718—Seminole							
Donalsonville Hospital♣	Gen	Part	30	21	6	238	1,450
Douglas, 5,175—Coffee							
Douglas Hospital	Gen	City	31	21	12	452	....
Dublin, 7,814—Laurens							
Claxton Sanitarium	Gen	Indiv	65	45	12	260	2,412
Coleman Hospital	Gen	Indiv	45	26	6	256	1,760
U. S. Naval Hospital	Gen	Navy	400	421	6	32	2,600
Eastman, 3,311—Dodge							
Coleman Memorial Hospital♣	Gen	Part	18	10	5	75	694
Elberton, 6,188—Elbert							
Elbert County Hospital	Gen	CyCo	24	16	6	282	830
Emory University, 250—De Kalb							
Emory University Hosp.♦♣	Gen	NPAssn	274	202	36	1,802	9,757
Fort Benning, —Chattahoochee							
Station Hospital♣	Gen	Army	800	398	33	876	10,211
Gainesville, 10,243—Hall							
Downey Hospital♣	Gen	Corp	52	37	13	438	2,246
Hall County Memorial Hosp.	Gen	County	56	20	10	903	1,126
Griffin, 13,222—Spalding							
R. F. Strickland and Son Memorial Hospital♣	Gen	CyCo	42	32	9	660	2,385
Habira, 980—Lowndes							
Smith Hospital	Gen	Indiv	36	19	8	127	1,200
Hawkinsville, 3,600—Pulaski							
R. J. Taylor Memorial Hosp.	Gen	NPAssn	34	16	7	192	1,217
Jasper, 3,6—Pickens							
Roper Hospital	Gen	Indiv	26	13	8	276	992
Jesup, 2,905—Wayne							
Ritch-Leaphart Hospital	Gen	Part	56	37	13	143	2,275
La Grange, 21,983—Troup							
City-County Hospital♣	Gen	CyCo	95	60	18	854	3,807
Louisville, 1,863—Jefferson							
Pilcher Hospital	Gen	Indiv	35	15	6	120	1,520
Macon, 57,865—Bibb							
Clinic Hospital	Gen	Corp	38	32	10	268	2,180
Hopewell Sanatorium	Unit of Macon Hospital						
Macon Hospital♣♦	GenTb	CyCo	248	211	40	1,865	7,57
Mercy Hospital♣	Gen	Church	38	23	10	335	1,488
Middle Georgia Hospital♣	Gen	Corp	47	40	12	247	2,441
St. Luke Hospital	Gen	NPAssn	20	12	6	60	455
Station Hospital	Gen	Army	50	7	1	2	400
Marietta, 8,667—Cobb							
Marietta Hospital	Gen	Corp	54	39	21	852	2,920
Metter, 1,825—Candler							
Kennedy Memorial Hospital	Gen	Indiv	20	16	3	115	1,029
Milledgeville, 6,778—Baldwin							
Allen's Invalid Home	N&M	Indiv	131	130	..	....	247
Milledgeville State Hosp.♦	Ment	State	9,413	8,805	..	....	2,080
Richard Binion Clinic Hosp.	Gen	Indiv	60	32	12	353	2,214
Scott Hospital	Gen	Indiv	25	24	6	100	650
Millen, 2,890—Jenkins							
Millen Hospital♣	Gen	Indiv	24	11	8	92	736
Mulkey Hospital	Gen	Part	40	19	16	217	1,313
Monroe, 4,168—Walton							
Walton County Hospital	Gen	CyCo	42	18	13	308	1,428
Montezuma, 2,340—Macon							
Macon County Clinic Hospital	Gen	Part	31	19	4	58	860
Riverside Sanatorium	Gen	Indiv	35	22	8	151	1,154
Moultrie, 10,147—Colquitt							
Vereen Memorial Hospital	Gen	NPAssn	58	40	14	568	2,734
Nashville, 2,449—Berrien							
Askew Memorial Hospital	Gen	Indiv	17	6	5	146	731
Ocilla, 2,124—Irwin							
Ocilla Hospital	Gen	Part	30	13	5	136	680
Pelham, 2,579—Mitchell							
Howard-Pirkle Hospital	Gen	Part	20	8	6	71	501
Quitman, 4,450—Brooks							
Brooks County Hospital	Gen	CyCo	37	23	10	221	1,347
Reidsville, 605—Tattnall							
Jelks Hospital	Gen	Indiv	13	9	3	123	474
Rome, 26,282—Floyd							
Battey State Hospital♣♦	TB	State	2,250	925	..	....	867
Floyd Hospital♣	Gen	County	75	57	20	804	4,265
Marbin Hospital♣	Gen	Corp	60	36	12	714	3,771
McCall Hospital♣	Gen	Corp	67	50	24	1,267	3,780
Royston, 1,549—Franklin							
Brown's Hospital	Gen	Indiv	20	2	3	60	498
Sandersville, 2,508—Washington							
Rawlings Sanitarium♣	Gen	NPAssn	50	40	12	948	1,660

Key to symbols and abbreviations is on page 1396

GEORGIA—Continued

Hospitals and Sanatoriums	Type of Service	Ownership or Control	Beds	Average Census †	Bassinets	Number of Births	Admissions †
Savannah, 95,996—Chatham							
Central of Georgia Railway Hospital♣	Indus	NPAssn	76	52	..	...	2,278
Charity Hospital	Gen	NPAssn	109	54	39	367	5,084
Georgia Infirmary	Gen	NPAssn	95	42	12	375	2,246
Oglethorpe Sanatorium	Gen	Corp	50	40	16	127	1,911
St. Joseph's Hospital♣◇	Gen	Church	324	95	26	850	4,044
Telfair Hospital	Gen	NPAssn	80	49	38	328	2,972
U. S. Marine Hospital♣	Gen	USPHS	100	133	..	...	2,206
Warren A. Candler Hosp.♣◇	Gen	Church	127	95	23	1,020	5,288
Smyrna, 1,440—Cobb							
Brawner's Sanitarium	N&M	Indiv	45	44	..	...	1,244
Statesboro, 5,028—Bulloch							
Bulloch County Hospital	Gen	County	60	68	15	479	2,511
Van Buren's Sanitarium	Gen	Indiv	25	17	5	25	250
Thomasville, 12,963—Thomas							
John D. Archbold Memorial Hospital♣	Gen	NPAssn	110	87	15	429	4,242
Tifton, 5,228—Tift							
Tift County Hospital	Gen	County	50	36	12	698	2,903
Toccoa, 5,494—Stephens							
Stephens County Hospital	Gen	County	50	32	8	428	2,433
Trion, 2,800—Chattooga							
Riegel Community Hospital	Gen	NPAssn	30	26	8	347	1,600
Valdosta, 15,363—Lowndes							
Little-Griffin Hospital	Gen	NPAssn	80	69	18	613	4,205
Vidalia, 4,109—Toombs							
Gross-Mercer Hospital	Gen	Corp	17	3	7	195	985
Vienna, 2,963—Dooly							
Dooly Hospital	Gen	Corp	17	8	4	147	810
Warm Springs, 608—Meriwether							
Georgia Warm Springs Foundation♣◇	Orth	NPAssn	145	153	..	...	799
Washington, 3,577—Wilkes							
Washington General Hospital	Gen	City	50	42	8	284	2,269
Waycross, 16,765—Ware							
Atlantic Coast Line Hosp.♣	Indus	NPAssn	75	39	..	...	1,400
Ware County Hospital	Gen	County	90	69	10	850	4,275
West Point, 3,591—Troup							
Valley Hospital	Gen	City	28	24	7	458	2,561
Related Institutions							
Athens, 29,650—Clarke							
Gilbert Memorial Infirmary	Inst	State	35	7	..	...	1,004
Atlanta, 302,288—Fulton							
"Aldmore" Convalescent Hospital	Orth	NPAssn	70	59	..	...	385
Duelle's Infirmary	Gen	Indiv	20	14	3	45	460
Florence Crittenton Home	Mat	NPAssn	6	3	10	64	71
Our Lady of Perpetual Help Free Cancer Home	Cancer	Church	80	51	..	...	264
Barwick, 400—Brooks							
Barwick Hospital	Gen	Indiv	6	1	3	80	369
Clayton, 1,088—Rabun							
Rabun County Maternity Hospital	Mat	County	12	No data supplied			
Columbus, 53,280—Muscogee							
Muscogee County Tuberculosis Hospital	TB	County	40	51	..	...	55
Cordele, 7,925—Crisp							
Gillespie Hospital	Gen	Church	30	10	6	28	576
Gracewood, 500—Richmond							
Georgia Training School for Mental Defectives	MeDe	State	560	508	..	...	110
Lyons, 1,966—Toombs							
Aiken Hospital	Gen	Indiv	10	6	5	143	484
Stone Mountain, 1,408—De Kalb							
Brook Haven Manor Sanitarium	N&M	Indiv	50	25	..	...	100
Summerville, 1,254—Chattooga							
Summerville-Trion Hospital	Gen	Indiv	20	8	6	184	565

IDAHO

Hospitals and Sanatoriums	Type of Service	Ownership or Control	Beds	Average Census †	Bassinets	Number of Births	Admissions †
American Falls, 1,459—Power							
Schlitz Memorial Hospital	Gen	County	21	9	6	180	753
Blackfoot, 3,981—Bingham							
State Hospital South	Ment	State	750	651	..	...	225
Boise, 26,158—Ada							
St. Alphonsus Hospital♣◇	Gen	Church	125	128	26	1,030	5,196
St. Luke's Hospital♣◇	Gen	Church	124	103	28	649	4,341
Veterans Admin. Hospital♣	Gen	Vet	262	191	..	...	2,512
Bonners Ferry, 1,345—Boundary							
Boundary County Hospital	Gen	County	25	10	6	145	936
Burley, 5,228—Cassia							
Cottage Hospital	Gen	Corp	32	28	10	176	1,083
Caldwell, 7,272—Canyon							
Caldwell Sanitarium	Gen	Part	22	20	7	97	801
Coeur d'Alene, 16,046—Kootenai							
Lake City General Hospital	Gen	Indiv	37	24	17	425	1,443
Cottonwood, 673—Idaho							
Our Lady of Consolation Hospital	Gen	Church	35	25	10	130	1,004
Council, 890—Adams							
Community Hospital	Gen	NPAssn	25	17	8	121	801
Gooding, 2,568—Gooding							
Gooding County Hospital	Gen	NPAssn	16	10	5	200	380
Idaho State Tuberculosis Hospital	TB	State	42	..	..	Estab. 1947	

IDAHO—Continued

Hospitals and Sanatoriums	Type of Service	Ownership or Control	Beds	Average Census †	Bassinets	Number of Births	Admissions †
Grangeville, 1,929—Idaho							
General Hospital	Gen	City	25	14	7	166	687
Hailey, 1,445—Blaine							
Hailey Clinical Hospital	Gen	Indiv	22	11	7	132	649
Idaho Falls, 15,024—Bonneville							
Idaho Falls Latter-Day Saints' Hospital♣◇	Gen	Church	111	79	40	1,019	4,622
Sacred Heart Hospital♣	Gen	Church	28	23	7	62	1,021
Kellogg, 4,235—Shoshone							
Wardner Hospital	Gen	Part	35	28	9	265	1,275
Lewiston, 10,548—Nez Perce							
St. Joseph's Hospital♣◇	Gen	Church	120	94	19	749	3,388
Malad City, 2,731—Oneida							
Oneida Hospital	Gen	NPAssn	17	7	7	165	450
Moscow, 6,014—Latah							
Gritman Memorial Hospital	Gen	Corp	58	43	21	536	1,956
Nampa, 12,149—Canyon							
Mercy Hospital♣◇	Gen	Church	92	85	29	723	4,399
Nazarene Missionary Sanitarium (Samaritan Hospital Division)♣◇	Gen	Church	60	45	10	246	1,872
Orofino, 1,992—Clearwater							
Orofino Hospital	Gen	Part	28	10	4	89	431
State Hospital North	Ment	State	454	430	..	...	61
Pocatello, 18,133—Bannock							
Pocatello General Hospital♣◇	Gen	CyCo	75	60	22	525	2,496
St. Anthony's Mercy Hosp.♣◇	Gen	Church	100	77	25	961	4,092
Preston, 4,236—Franklin							
General Memorial Hospital	Gen	NPAssn	17	12	8	230	676
Rexburg, 3,427—Madison							
Harlo B. Rigby Hospital	Gen	Indiv	15	6	7	99	419
Rupert, 3,167—Minidoka							
Rupert General Hospital	Gen	Indiv	11	8	4	96	575
St. Maries, 2,234—Benewah							
St. Maries Hospital	Gen	NPAssn	30	20	6	94	1,004
Sandpoint, 4,356—Bonner							
Community Hospital	Gen	NPAssn	35	28	8	211	885
Soda Springs, 1,067—Caribou							
Caribou County Hospital	Gen	County	34	17	11	151	778
Twin Falls, 11,851—Twin Falls							
Twin Falls County General Hospital	Gen	County	82	68	28	1,014	3,667
Wallace, 3,829—Shoshone							
Providence Hospital♣	Gen	Church	50	26	12	186	1,664
Wallace Hospital	Gen	Part	40	15	8	109	993
Wendell, 1,601—Gooding							
St. Valentine's Hospital	Gen	Church	31	20	12	467	1,092
Related Institutions							
Boise, 26,158—Ada							
Booth Memorial Hospital	Mat	Church	96	15	14	75	185
Nampa, 12,149—Canyon							
State School and Colony	MeDe	State	632	630	..	...	64
Priest River, 1,656—Bonner							
Priest River Hospital	Gen	Indiv	10	3	..	4	77

ILLINOIS

Hospitals and Sanatoriums	Type of Service	Ownership or Control	Beds	Average Census †	Bassinets	Number of Births	Admissions †
Alton, 31,255—Madison							
Alton Memorial Hospital♣◇	Gen	Church	140	105	32	1,144	5,921
Alton State Hospital	Ment	State	1,576	1,705	..	...	726
St. Anthony's Infirmary and Sanitarium	Gen	Church	95	78	..	...	979
St. Joseph's Hospital♣◇	Gen	Church	165	153	49	1,163	6,162
Amboy, 1,985—Lee							
Amboy Public Hospital	Gen	NPAssn	12	9	5	166	365
Anna, 4,692—Union							
Anna State Hospital♣	Ment	State	2,414	2,260	..	...	697
Hale-Willard Memorial Hosp.	Gen	City	16	9	7	435	872
Aurora, 47,170—Kane							
Copley Hospital♣◇	Gen	NPAssn	200	110	40	997	4,070
Kane County Springbrook Sanitarium	TB	County	75	60	..	...	79
Merryville Sanitarium♣	N&M	Church	172	165	..	...	500
St. Charles Hospital♣◇	Gen	Church	125	100	28	694	3,304
St. Joseph Mercy Hospital♣◇	Gen	Church	139	99	39	788	4,073
Avon, 895—Fulton							
Saunders Hospital	Gen	NPAssn	16	12	7	156	231
Batavia, 5,161—Kane							
Fox River Sanitarium	TB	NPAssn	75	47	..	...	96
Beardstown, 6,305—Cass							
Schmitt Memorial Hospital	Gen	City	56	31	8	338	1,377
Belleville, 28,405—St. Clair							
St. Elizabeth's Hospital	Gen	Church	133	138	32	1,481	5,391
Belvidere, 9,094—Boone							
Highland Hospital	Gen	NPAssn	37	26	5	140	1,115
St. Joseph's Hospital	Gen	Church	55	37	17	286	1,937
Benton, 7,272—Franklin							
Boone Hospital	Gen	Indiv	25	12	9	98	493
Berwyn, 48,451—Cook							
MacNeal Memorial Hosp.♣◇	Gen	NPAssn	150	146	45	1,809	7,048
Bloomington, 32,868—McLean							
Mennonite Hospital◇	Gen	Church	102	96	23	1,084	3,649
St. Joseph's Hospital◇	Gen	Church	200	177	35	649	5,182
Blue Island, 16,038—Cook							
St. Francis Hospital♣◇	Gen	Church	110	99	26	1,084	4,055
Breese, 3,206—Clinton							
St. Joseph Hospital	Gen	Church	30	20	16	361	1,143

Key to symbols and abbreviations is on page 1388

ILLINOIS—Continued

Hospitals and Sanatoriums	Type of Service	Ownership or Control	Beds	Average Census †	Bassinets	Number of Births	Admissions †
Bushnell, 2,906—McDonough							
"Elmgrove" McDonough County Tuberculosis Sanatorium	TB	County	36	14	..	...	34
Cairo, 14,407—Alexander							
Alexander County Tuberculosis Sanatorium	TB	County	56	41	..	...	99
St. Mary's Infirmary◇	Gen	Church	100	68	12	705	5,819
Canton, 11,577—Fulton							
Graham Hospital◇	Gen	NPAssn	112	103	35	884	4,245
Carbondale, 8,536—Jackson							
Holden Hospital	Gen	Church	75	46	15	655	2,415
Carlinville, 4,965—Macoupin							
Macoupin Hospital	Gen	Indiv	28	22	6	295	1,005
Carrollton, 2,285—Greene							
Boyd Memorial Hospital	Gen	NPAssn	22	19	12	375	1,006
Centralia, 16,345—Marion							
St. Mary's Hospital	Gen	Church	85	73	15	678	5,634
Champaign, 23,302—Champaign							
Burnham City Hospital◇	Gen	City	115	114	25	1,000	5,123
Charleston, 8,197—Coles							
M. A. Montgomery Memorial Sanitarium	Gen	NPAssn	35	19	12	279	1,005
Chester, 5,110—Randolph							
Chester Hospital	Gen	NPAssn	23	14	12	117	395
Chicago, 3,396,808—Cook							
Albert Merritt Billings Hosp.	Unit of University of Chicago Clinics						
Alexian Brothers	Gen	Church	211	182	..	....	4,772
American Hospital◇◇◇	Gen	NPAssn	160	121	25	725	6,673
Augustana Hospital◇◇◇	Gen	Church	275	263	30	1,175	7,737
Belmont Community Hosp.◇	Gen	NPAssn	110	82	27	985	4,566
Bethany Methodist Hospital◇	Gen	Church	25	18	..	...	965
Bethany Sanitarium and Hospital◇	Gen	Church	81	51	21	812	2,938
Bobs Roberts Memorial Hospital for Children	Unit of University of Chicago Clinics						
Borrows Hospital	Gen	Indiv	40	11	6	97	422
Chicago Clinic of Physical Medicine	Gen	NPAssn	55	30	..	...	235
Chicago Eye, Ear, Nose and Throat Hospital	ENT	Corp	75	15	..	...	1,228
Chicago Fresh Air Hospital	TB	NPAssn	70	44	..	...	181
Chicago Intensive Treatment Center†	Ven	City	200	154	..	...	5,784
Chicago Lying-In Hosp.◇◇	Unit of University of Chicago Clinics						
Chicago Memorial Hosp.◇◇◇	Gen	NPAssn	92	80	20	528	5,002
Chicago State Hospital◇◇	Ment	State	4,560	4,720	..	...	1,806
Children's Memorial Hosp.◇◇	Chil	NPAssn	252	130	..	...	4,037
City of Chicago Municipal Tuberculosis Sanitarium◇◇	TB	City	1,296	1,100	..	...	1,380
Columbus Hospital◇◇	Gen	Church	132	95	18	459	3,444
Cook County Children's Hospital	Unit of Cook County Hospital						
Cook County Hospital◇◇◇	Gen	County	3,200	2,559	225	5,867	72,272
Cook County Psychopathic Hospital	Unit of Cook County Hospital						
Edgewater Hospital◇◇	Gen	NPAssn	138	119	38	1,144	6,235
Englewood Hospital◇◇	Gen	NPAssn	157	138	32	1,246	6,517
Evangelical Hospital◇◇	Gen	Church	195	187	60	2,634	8,241
Fairview Sanitarium	N&M	Corp	50	42	..	...	581
Frank Cuneo Hospital	Mat	Church	75	48	50	1,354	2,243
Franklin Boulevard Community Hospital◇	Gen	NPAssn	66	54	..	48	2,329
Garfield Park Community Hospital◇◇	Gen	NPAssn	150	101	32	1,485	5,539
Grant Hospital◇◇◇	Gen	NPAssn	243	189	45	1,473	7,625
Henrotin Hospital◇◇◇	Gen	NPAssn	102	69	25	784	3,415
Holy Cross Hospital◇◇	Gen	Church	130	120	36	1,982	6,154
Home for Destitute Crippled Children	Unit of University of Chicago Clinics						
Hospital of St. Anthony de Padua◇◇◇	Gen	Church	211	182	39	1,986	8,078
Illinois Central Hospital◇◇◇	Gen	NPAssn	250	191	40	941	6,675
Illinois Eye and Ear Infirmary◇◇	ENT	State	147	96	..	....	3,023
Illinois Masonic Hosp.◇◇◇	Gen	NPAssn	225	149	40	1,306	6,547
Illinois Neuropsychiatric Institute◇◇	Ment	State	82	58	..	...	884
Illinois Surgical Institute for Children◇	Unit of Research and Educational Hosps.						
Jackson Park Hospital◇◇	Gen	Corp	135	102	25	641	3,945
La Rabida Jackson Park Sanitarium◇	CardChil	NPAssn	100	55	..	...	151
Lewis Memorial Maternity Hospital◇◇	Mat	Church	117	44	100	1,757	2,339
Loretto Hospital◇◇◇	Gen	Church	134	103	21	1,339	5,103
Lutheran Deaconess Home and Hospital◇◇◇	Gen	Church	193	169	42	1,618	9,445
Manor Hospital	Gen	NPAssn	44	25	..	...	1,273
Martha Washington Hospital	Gen	NPAssn	75	57	15	577	3,261
Mercy Hospital-Loyola University Clinics◇◇◇	Gen	Church	363	301	46	1,147	9,320
Michael Reese Hospital◇◇◇	Gen	NPAssn	647	487	71	2,536	16,081
Misericordia Hospital and Home for Infants◇	Mat	Church	58	7	19	905	924
Mother Cabrini Memorial Hospital◇◇	Gen	Church	129	90	30	1,220	4,791
Mount Sinai Hospital◇◇◇	Gen	NPAssn	223	206	44	1,711	6,313
Municipal Contagious Disease Hospital◇◇	Iso	City	429	63	..	....	2,203
Northwest Hospital	Gen	NPAssn	47	..	..	Estab. 1946	
Norwegian-American Hospital◇◇◇	Gen	NPAssn	164	144	50	1,758	7,097
Orthopaedic Institute	See Illinois Surgical Institute for Children						

ILLINOIS—Continued

Hospitals and Sanatoriums	Type of Service	Ownership or Control	Beds	Average Census †	Bassinets	Number of Births	Admissions †
Passavant Memorial Hospital◇◇◇	Gen	NPAssn	220	209	35	995	5,838
Pinel Sanitarium	N&M	NPAssn	50	35	..	...	340
Presbyterian Hospital◇◇◇	Gen	Church	435	374	52	1,854	12,554
Provident Hospital◇◇	Gen	NPAssn	160	138	28	1,599	5,287
Ravenswood Hospital◇◇	Gen	NPAssn	155	129	37	1,774	6,105
Research and Educational Hospitals◇◇◇	Gen	State	428	368	24	833	6,391
Roosevelt Memorial Hospital	Gen	Corp	35	17	..	...	1,124
Roseland Community Hospital◇◇	Gen	NPAssn	101	76	24	1,044	4,812
St. Anne's Hospital◇◇◇	Gen	Church	315	288	80	2,994	9,325
St. Anthony de Padua Hosp.	See Hospital of St. Anthony de Padua						
St. Bernard's Hospital◇◇◇	Gen	Church	190	183	42	1,409	10,353
St. Elizabeth Hospital◇◇◇	Gen	Church	274	242	77	2,753	9,936
St. George Hospital◇◇	Gen	Church	100	72	..	...	3,200
St. Joseph Hospital◇◇◇	Gen	Church	260	207	40	1,582	7,259
St. Luke's Hospital◇◇◇	Gen	NPAssn	534	467	55	1,706	15,486
St. Mary of Nazareth Hospital◇◇◇	Gen	Church	263	239	60	2,859	10,910
St. Vincent's Infant and Maternity Hospital◇◇	MatChil	Church	200	205	20	494	954
Sarah Morris Hospital for Children	Unit of Michael Reese Hospital						
Shriners Hospital for Crippled Children◇◇	Orth	NPAssn	60	54	..	...	225
South Chicago Community Hospital◇◇◇	Gen	NPAssn	149	144	40	1,705	5,887
South Shore Hospital◇◇	Gen	Corp	100	78	17	997	4,275
Southtown Hospital	Gen	NPAssn	87	71	13	665	2,982
Swedish Covenant Hosp.◇◇◇	Gen	Church	193	177	65	2,139	6,589
U. S. Marine Hospital◇◇◇	Gen	USPHS	306	181	..	...	2,424
University Hospitals◇◇◇	Gen	Church	100	59	..	...	3,343
University of Chicago Clinics◇◇◇	Gen	NPAssn	526	420	134	4,008	12,615
Veterans Rehabilitation Center◇	Ment	State	20	16	..	...	216
Walther Memorial Hosp.◇◇◇	Gen	Church	175	135	31	1,385	6,561
Wesley Memorial Hosp.◇◇◇	Gen	Church	579	469	51	1,473	13,045
Women and Children's Hospital◇◇◇	Gen	NPAssn	115	107	30	1,380	4,022
Woodlawn Hospital◇◇◇	Gen	NPAssn	112	92	22	591	4,510
Chicago Heights, 32,461—Cook							
St. James Hospital◇◇	Gen	Church	100	85	30	1,081	4,625
Christopher, 3,823—Franklin							
Miners Hospital	Gen	NPAssn	43	...	10	Estab. 1947	
Clinton, 6,331—DeWitt							
John Warner Hospital	Gen	City	45	32	6	319	1,268
Danville, 36,919—Vermilion							
Lake View Hospital◇	Gen	NPAssn	180	109	30	822	5,016
St. Elizabeth Hospital◇	Gen	Church	195	145	35	1,925	5,524
Vermilion County Tuberculosis Dispensary and Hospitals	TB	County	60	44	..	...	48
Veterans Admin. Hospital◇	Ment	Vet	2,025	1,955	..	...	634
Decatur, 59,305—Macon							
Decatur and Macon County Hospitals◇	Gen	NPAssn	230	219	45	1,548	6,305
Macon County Tuberculosis Sanatorium◇◇	TB	County	80	75	..	...	97
St. Mary's Hospital	Gen	Church	190	159	25	1,332	7,494
Wabash Employes' Hospital	Indus	NPAssn	75	47	..	...	1,046
DeKalb, 9,146—DeKalb							
DeKalb County Tuberculosis Sanatorium	TB	County	27	13	..	...	21
DeKalb Public Hospital	Gen	City	40	30	12	315	1,101
St. Mary's Hospital◇	Gen	Church	50	36	13	969	1,356
Des Plaines, 9,518—Cook							
Forest Sanitarium	N&M	Indiv	26	20	..	...	145
Dixon, 10,671—Lee							
Dixon Public Hospital◇	Gen	NPAssn	105	66	22	650	2,630
Dixon State Hospital◇	MeDe	State	4,501	4,510	10	12	500
Downey,—Lake							
Veterans Admin. Hospital◇◇	Ment	Vet	2,872	2,010	..	...	1,279
Dunning,—Cook							
Chicago State Hospital	See Chicago						
Du Quoin, 7,515—Perry							
Marshall Browning Hospital	Gen	NPAssn	57	42	12	567	1,967
Dwight, 2,499—Livingston							
Veterans Admin. Hospital◇	Gen	Vet	225	181	..	...	2,383
East Moline, 12,359—Rock Island							
East Moline State Hospital	Ment	State	2,351	2,195	..	...	641
East St. Louis, 75,655—St. Clair							
Christian Welfare Hosp.◇◇	Gen	NPAssn	133	111	33	1,319	4,967
Pleasant View Sanatorium◇◇	TB	County	100	90	..	...	129
St. Mary's Hospital◇◇	Gen	Church	265	222	36	1,023	6,640
Edwardsville, 8,008—Madison							
Madison County Tuberculosis Sanatorium	TB	County	99	73	..	...	101
Effingham, 6,180—Effingham							
St. Anthony's Hospital	Gen	Church	122	95	16	823	3,349
Eldorado, 4,401—Saline							
Ferrell Hospital Clinic	Gen	Part	45	30	12	367	1,088
Elgin, 38,333—Kane							
Elgin State Hospital◇◇	Ment	State	5,216	5,369	..	...	2,089
Resthaven Sanitarium	N&M	Indiv	85	70	..	...	98
St. Joseph Hospital◇	Gen	Church	150	122	30	932	4,947
Sherman Hospital◇	Gen	NPAssn	195	132	30	989	5,548
Elmhurst, 15,459—Du Page							
Memorial Hospital◇	Gen	NPAssn	150	133	35	1,386	6,671
Evanston, 65,330—Cook							
Community Hospital	Gen	NPAssn	28	19	7	198	938
Evanston Hospital◇◇◇	Gen	NPAssn	250	220	46	1,727	7,998
St. Francis Hospital◇◇◇	Gen	Church	351	294	79	2,350	10,257

Key to symbols and abbreviations is on page 1398

ILLINOIS—Continued

Hospitals and Sanatoriums	Type of Service	Ownership or Control	Beds	Average Census †	Bassinets	Number of Births	Admissions †
Evergreen Park, 3,313—Cook							
Little Company of Mary Hospital♦♣♣	Gen	Church	200	184	63	3,256	10,658
Fairbury, 2,306—Livingston							
Fairbury Hospital	Gen	NPAssn	31	30	16	383	1,448
Fort Sheridan,—Lake							
Station Hospital♣	Gen	Army	300	150	10	144	4,546
Freeport, 22,366—Stephenson							
Deaconess Hospital♣◇	Gen	NPAssn	92	93	25	770	3,687
St. Francis Hospital♣◇	Gen	Church	126	117	20	634	3 914
Galesburg, 28,376—Knox							
Galesburg Cottage Hosp.♣◇	Gen	NPAssn	113	96	22	674	3,417
St. Mary's Hospital	Gen	Church	166	98	20	776	2,564
Geneseo, 3,824—Henry							
J. C. Hammond City Hosp.♣	Gen	City	30	24	8	294	1,101
Geneva, 4,101—Kane							
Community Hospital♣	Gen	NPAssn	73	49	20	365	2,161
Granite City, 22,974—Madison							
St. Elizabeth Hospital♣◇	Gen	Church	125	112	25	1,103	4,302
Great Lakes,—Lake							
U. S. Naval Hospital♦♣	Gen	Navy	1,564	1,160	34	444	9,351
Harrisburg, 11,453—Saline							
Harrisburg Hospital	Gen	Corp	30	10	5	68	444
Lightner Hospital	Gen	Part	56	25	10	203	2,727
Harvard, 3,321—McHenry							
Harvard Community Hospital	Gen	NPAssn	25	16	10	209	650
Harvey, 17,678—Cook							
Ingalls Memorial Hospital♣	Gen	NPAssn	93	73	25	1,021	4,295
Herrin, 9,335—Williamson							
Herrin Hospital	Gen	NPAssn	85	70	24	1,006	2,883
Highland, 3,826—Madison							
St. Joseph's Hospital	Gen	Church	70	65	14	580	2,975
Highland Park, 14,476—Lake							
Highland Park Hospital♣	Gen	NPAssn	51	35	20	479	1,324
Hillsboro, 4,514—Montgomery							
Hillsboro Hospital	Gen	NPAssn	46	44	10	313	1,344
Hines,—Cook							
Veterans Admin. Hospital♦♣	Gen	Vet	3,474	2,687	..	....	90,220
Hinsdale, 7,336—Du Page							
Hinsdale Sanitarium and Hospital◇	Gen	Church	100	104	15	549	3,144
Jacksonville, 19,844—Morgan							
Jacksonville State Hosp.♦◇	Ment	State	3,227	3,080	..	....	944
Norbury Sanatorium♣	N&M	Corp	100	81	..	....	176
"Oaklawn" Morgan County Tuberculosis Sanatorium	TB	County	76	34	..	....	31
Our Saviour's Hospital♣◇	Gen	Church	80	67	15	403	1,377
Passavant Memorial Hosp.◇	Gen	Church	84	72	12	397	2,395
Joliet, 42,993—Will							
Illinois State Penitentiary Hospital	Inst	State	130	40	..	....	2,397
St. Joseph's Hospital♣◇	Gen	Church	303	278	45	1,997	8,681
Silver Cross Hospital♣◇	Gen	NPAssn	171	112	33	975	4,042
Will County Tuberculosis Sanatorium	TB	County	98	60	..	....	73
Kankakee, 22,241—Kankakee							
Kankakee State Hospital♦♣	Ment	State	4,332	3,992	..	....	1,261
St. Mary's Hospital♣◇	Gen	Church	186	169	42	1,480	6,580
Kewanee, 16,569—Henry							
Kewanee Public Hospital	Gen	NPAssn	55	50	11	327	1,661
St. Francis Hospital♣◇	Gen	Church	100	75	18	540	2,985
Lake Forest, 6,885—Lake							
Lake Forest Hospital♣	Gen	NPAssn	40	32	10	185	1,412
La Salle, 12,815—La Salle							
St. Mary's Hospital♣◇	Gen	Church	100	83	20	696	2,527
Libertyville, 3,930—Lake							
Condell Memorial Hospital	Gen	NPAssn	25	16	10	294	1,371
Marmon House	N&M	Indiv	20	8	..	....	70
Lincoln, 12,752—Logan							
Evangelical Deaconess Hosp.	Gen	Church	65	50	15	367	1,830
Lincoln State School and Colony♦	Mefic	State	4,874	4,472	..	....	350
St. Clara's Hospital	Gen	Church	60	51	6	304	2,092
Litchfield, 7,048—Montgomery							
St. Francis Hospital	Gen	Church	143	135	17	650	4,350
Markham, 845—Tazewell							
Oak Knoll Sanatorium	TB	County	45	30	..	....	43
Macomb, 8,704—McDonough							
Phelps Hospital	Gen	NPAssn	45	36	10	221	948
St. Francis Hospital♣◇	Gen	Church	88	83	12	454	2,973
Manteno, 1,537—Kankakee							
Manteno State Hospital♦♣	Ment	State	7,605	6,000	..	....	2,017
Marion, 9,251—Williamson							
Veterans Admin. Hospital♣	Gen	Vet	202	128	..	....	2,801
Mattoon, 15,827—Coles							
Memorial Methodist Hospital	Gen	Church	50	42	14	695	2,253
Melrose Park, 10,975—Cook							
Westlake Hospital♣	Gen	NPAssn	66	44	25	780	2,143
Mendota, 4,218—La Salle							
Harris Hospital	Gen	Part	27	16	8	243	603
Metropolis, 6,987—Massac							
Metropolis Memorial Hosp.	Gen	Part	22	14	5	143	520
Moline, 34,688—Rock Island							
Lutheran Hospital♣◇	Gen	Church	125	114	30	973	4,178
Moline Public Hospital♣◇	Gen	City	198	185	44	1,439	7,855
Monmouth, 9,076—Warren							
Monmouth Hospital♣	Gen	City	76	65	18	519	1,721
Montibello, 2,525—Platt							
John and Mary E. Kirby Hospital	Gen	NPAssn	32	27	8	119	923
Morris, 6,145—Grundy							
Morris Hospital	Gen	NPAssn	40	23	14	366	1,040
Morrison, 3,187—Whiteside							
Morrison Hospital	Gen	City	19	16	12	325	799

ILLINOIS—Continued

Hospitals and Sanatoriums	Type of Service	Ownership or Control	Beds	Average Census †	Bassinets	Number of Births	Admissions †
Mount Vernon, 14,724—Jefferson							
Good Samaritan Hospital	Gen	Church	33	29	12	604	1,685
Mowaqua, 1,366—Shelby							
Mowaqua Hospital	Gen	Indiv	28	18	8	82	186
Murphysboro, 8,976—Jackson							
St. Andrew's Hospital♣	Gen	Church	36	26	10	474	1,694
Naperville, 5,272—Du Page							
Edward Sanatorium♣	TB	NPAssn	110	104	..	....	190
Normal, 6,983—McLean							
Brokaw Hospital♣◇	Gen	Church	96	78	14	987	5,260
Fairview Sanatorium	TB	County	56	26	..	....	37
North Riverside (Riverside P. O.),—Cook							
Municipal Tuberculosis Sanitarium North Riverside Division	TB	City	256	160	..	....	1,389
Oak Forest, 825—Cook							
Cook County Infirmary	Chr	County	2,450	2,113	..	....	1,012
Cook County Tuberculosis Hospital	TB	County	551	292	13	....	442
Oak Park, 66,015—Cook							
Oak Park Hospital♣◇	Gen	Church	144	138	44	1,222	5,432
West Suburban Hospital♣◇	Gen	NPAssn	312	297	100	3,513	11,051
Olney, 7,831—Richland							
Olney Sanitarium◇	Gen	Corp	88	73	18	384	2,858
Oregon, 2,825—Ogle							
Warmolts Clinic Hospital	Gen	Indiv	25	15	6	70	480
Ottawa, 16,685—La Salle							
Highland	TB	County	74	55	..	....	61
Ottawa Tuberculosis Sanatorium♣	TB	Corp	133	123	..	....	133
Ryburn Memorial Hosp.♣◇	Gen	City	120	103	28	719	3,551
Pana, 5,566—Christian							
Huber Memorial Hospital♣◇	Gen	Church	40	30	12	367	1,284
Paris, 9,284—Edgar							
Paris Hospital◇	Gen	NPAssn	75	73	10	499	2,704
Paxton, 3,976—Ford							
Paxton Community Hospital	Gen	NPAssn	19	14	8	245	688
Pekin, 19,467—Tazewell							
Pekin Public Hospital	Gen	NPAssn	92	70	20	708	3,112
Peoria, 105,087—Peoria							
Cozette Sanatorium	N&M	Indiv	13	13	..	....	115
John C. Proctor Hospital◇	Gen	NPAssn	110	75	14	498	2,745
Methodist Hospital of Central Illinois♦♣◇	Gen	Church	200	161	40	1,843	6,770
Michell Farm Sanatorium	N&M	Indiv	30	30	..	....	21
Michell Sanatorium	N&M	Ind v	22	22	..	....	170
Peoria Municipal Tuberculosis Sanitarium♣♣	TB	City	102	67	..	....	118
Peoria State Hospital♦♣◇	Ment	State	2,761	2,695	..	....	815
St. Francis Hospital♦♣◇	Gen	Church	500	451	90	2,933	14,281
Perry, e 985—La Salle							
Peoples Hospital	Gen	NPAssn	30	44	12	150	1,194
Pittsfield, 2,884—Pike							
Illini Community Hospital	Gen	NPAssn	43	32	10	341	1,005
Pontiac, 9,385—Livingston							
Livingston County Sanat.	TB	County	50	39	..	....	39
St. James Hosp tal	Gen	Church	50	35	14	378	1,487
Princeton, 5,224—Bureau							
Julia Rackley Perry Memorial Hospital	Gen	City	57	25	15	409	1,532
Quincy, 40,459—Adams							
Blessing Hospital♣◇	Gen	NPAssn	128	100	25	765	3,980
Hillcrest	TB	County	42	33	..	....	38
St. Mary's Hospital♣♣◇	Gen	Church	180	165	25	819	5,293
Rantoul, 2,267—Champaign							
Station Hospital	Gen	Army	620	118	..	....	3,113
Red Bud, 1,302—Randolph							
St. Clement's Hospital	Gen	Church	21	19	12	370	830
Robinson, 4,311—Crawford							
Brooks Hospital	Gen	Part	23	19	6	271	982
Rochelle, 4,266—Ogle							
Rochelle Hospital	Gen	City	33	19	12	278	985
Rockford, 84,627—Winnebago							
Elmlawn Sanitarium	N&M	Indiv	30	23	..	....	401
Rockford Memorial Hosp.♣◇	Gen	NPAssn	104	104	23	824	3,914
Rockford Municipal Tuberculosis Sanatorium♣♣	TB	City	120	87	..	....	148
St. Anthony's Hospital♣◇	Gen	Church	265	270	60	1,939	8,852
Swedish American Hospital♣◇	Gen	NPAssn	125	113	30	1,140	5,393
Winnebago County Hospital	Gen	County	76	61	6	14	620
Rock Island, 42,775—Rock Island							
Rock Island County Tuberculosis Sanatorium	TB	County	65	47	..	....	51
St. Anthony's Hospital♣◇	Gen	Church	190	165	30	883	4,877
Rosiclare, 1,774—Hardin							
Rosiclare Hospital	Gen	Part	17	4	5	83	225
Rushville, 2,460—Schuyler							
Culbertson Hospital	Gen	Indiv	25	18	9	116	417
St. Charles, 5,870—Kane							
Delnor Hospital♣	Gen	NPAssn	30	21	10	231	980
Salem, 7,319—Marion							
Salem Memorial Hospital	Gen	NPAssn	40	33	10	400	1,758
Savanna, 4,792—Carroll							
Savanna City Hospital	Gen	City	30	21	12	256	865
Scott Field,—St. Clair							
Station Hospital♣	Gen	Army	300	246	12	280	6,142
Shelbyville, 4,692—Shelby							
Shelby County Memorial Hospital	Gen	NPAssn	21	13	8	196	540
Sparta, 3,084—Randolph							
Sutherland Hospital	Gen	Indiv	30	14	8	127	584

Key to symbols and abbreviations is on page 1356

ILLINOIS—Continued

Hospitals and Sanatoriums	Type of Service	Ownership or Control	Beds	Average Census †	Bassinets	Number of Births	Admissions †
Springfield, 75,503—Sangamon							
Memorial Hospital●▲○	Gen	NPAssn	241	211	40	1,004	6,390
Palmer Sanatorium▲	TB	Corp	83	75	..	...	118
St. John's Crippled Children's School and Hospital	Orth	Church	55	49	..	...	64
St. John's Hospital○	Gen	Church	654	632	70	2,405	16,749
St. John's Sanitarium	TB	Church	200	182	..	...	224
Spring Valley, 5,616—Bureau							
St. Margaret's Hospital	Gen	Church	90	82	15	529	3,207
Sterling, 11,363—Whiteside							
Home Hospital	Gen	NPAssn	25	10	6	100	601
Public Hospital▲	Gen	City	58	40	14	589	2,059
Streator, 14,900—La Salle							
St. Mary's Hospital	Gen	Church	110	80	15	947	5,157
Sycamore, 4,702—De Kalb							
Sycamore Municipal Hosp.▲	Gen	City	28	26	12	240	1,186
Taylorville, 6,313—Christian							
St. Vincent Hospital	Gen	Church	88	85	22	481	2,987
Tuscola, 2,838—Douglas							
Douglas County Jarman Memorial Hospital	Gen	County	42	33	12	326	1,305
Urbana, 14,664—Champaign							
Carle Memorial Hospital▲	Gen	Corp	68	56	12	391	2,657
Champaign County Hospital	Gen	County	35	21	10	47	266
Mercy Hospital▲○	Gen	Church	108	91	19	1,144	4,518
The Outlook	TB	County	50	47	..	...	44
Vandalia, 5,286—Fayette							
Mark Greer Hospital	Gen	Indiv	35	26	12	424	1,487
Watseka, 3,744—Iroquois							
Iroquois Hospital	Gen	NPAssn	38	27	15	533	1,566
Waukegan, 34,241—Lake							
Lake County General Hosp.	Gen	County	65	42	..	...	486
Lake County Tuberculosis Sanatorium●▲	TB	County	170	89	..	...	266
St. Therese's Hospital○	Gen	Church	185	155	39	1,206	7,724
Victory Memorial Hosp.●▲○	Gen	NPAssn	107	85	28	900	4,485
White Hall, 3,025—Greene							
White Hall Hospital	Gen	NPAssn	10	10	5	98	300
Winfield, 567—Du Page							
Winfield Hospital▲	TB	NPAssn	76	72	..	...	77
Zaee Sanatorium	TB	NPAssn	50	40	..	...	60
Winnetka, 12,430—Cook							
North Shore Health Resort●▲	N&M	Corp	75	70	..	...	451
Woodstock, 6,125—McHenry							
Woodstock Public Hospital	Gen	NPAssn	45	37	17	614	1,786

Related Institutions

Arlington Heights, 5,668—Cook							
Magnus Farm	Conv	Indiv	20	20	..	...	8
Batavia, 5,101—Kane							
Bellevue Place Sanitarium	N&M	Indiv	40	40	..	...	53
Belleville, 28,405—St. Clair							
St. Clair County Hospital and Home	InstGen	County	100	80	2	8	340
Chicago, 3,376,438—Cook							
Beverly Hills Rest Home	Conv	Indiv	10	10	..	...	...
Bigley Rest Home	Conv	Indiv	14	...	..	...	...
Catherine Booth Memorial Convalescent Hospital	Conv	Church	30	25	..	...	90
Chicago Home for Incurables	Incur	NPAssn	261	252	..	...	86
Convalescent Home	Conv	City	165	118	..	...	478
House of Correction Hospital	Inst	City	75	74	..	...	1,752
Jewish People's Convalescent Home	Conv	NPAssn	50	14	..	...	...
Long's Convalescent Home	Conv	Indiv	35	30	..	...	88
Martha Washington Home for Dependent Crippled Children	Orth	NPAssn	30	24	..	...	25
Reynolds Rest Home	Conv	Indiv	35	25	..	...	25
Rosary Hill Convalescent Home	Conv	Church	32	23	..	...	95
Salvation Army Booth Memorial Hospital	Mat	Church	91	62	12	242	364
Washington and Jane Smith Home	InstGen	NPAssn	22	15	..	...	42
Decatur, 30,265—Macon							
City Public Hospital	Iso	City	20	2	..	...	94
Des Plaines, 9,518—Cook							
Northwestern Hospital	Gen	NPAssn	14	6	5	72	226
Evanston, 65,380—Cook							
Broadhurst Nursing Home	Unit of Virginia Hall Nursing Homes						
The Cradle	Chil	NPAssn	60	30	..	...	302
Virginia Hall Nursing Homes	Conv	Corp	58	34	..	...	90
Geneva, 4,101—Kane							
State Training School for Girls	Inst	State	22	17	15	...	278
Godfrey, 300—Madison							
Beverly Farm	MeDe	Corp	175	172	..	...	25
Mattoon, 15,827—Coles							
Independent Order Odd Fellows Old Folks Home	Hosp. Inst	NPAssn	55	35	..	...	85
Menard, 22—Randolph							
Illinois Security Hospital	Ment	State	280	264	..	...	62
Moosehcart, 905—Kane							
Philadelphia Memorial Hosp.	Chil	NPAssn	65	36	..	...	1,887
Normal, 6,863—McLean							
Illinois Soldiers' and Sailors' Children's School Hospital	Inst	State	100	10	..	...	709
Park Ridge, 12,663—Cook							
Park Ridge Convalescent Home	Conv	Indiv	18	19	..	...	19
Peoria, 66,587—Peoria							
Florence Crittenton Home	Mat	NPAssn	70	60	6	73	82

ILLINOIS—Continued

Related Institutions	Type of Service	Ownership or Control	Beds	Average Census †	Bassinets	Number of Births	Admissions †
Pontiac, 9,585—Livingston							
Illinois State Penitentiary Hospital	Inst	State	180	40	..	...	856
Robinson, 4,311—Crawford							
Griffy Eye and Ear Infirmary	ENT	Indiv	11	1	..	...	312
Rockford, 84,677—Winnebago							
Children's Convalescent Home	Orth	NPAssn	35	20	..	...	67
St. Charles, 5,870—Kane							
Illinois State Training School for Boys	Inst	State	18	3	..	...	920
Urbana, 14,664—Champaign							
McKinley Memorial Hospital	Inst	State	150	40	..	...	3,858
Waterman, 579—De Kalb							
Bellevue Place Sanitarium	N&M	Indiv	30	...	..	Estab. 1947	
Wedron, 362—La Salle							
St. Joseph's Health Resort	Conv	Church	70	65	..	...	1,551
Wheaton, 7,589—Du Page							
Mary E. Pogue School	MeDe	Indiv	82	80	..	...	22
Wheeling, 326—Cook							
Addolorata Villa Health Resort for Women	Conv	Church	40	30	..	...	...

INDIANA

Hospitals and Sanatoriums

Anderson, 41,572—Madison							
St. John's Hickey Memorial Hospital●○	Gen	Church	250	188	50	2,148	5,518
Angola, 3,141—Steuben							
Cameron Hospital▲	Gen	NPAssn	22	15	5	210	670
Argos, 1,206—Marshall							
Kelly Hospital	Gen	NPAssn	10	8	4	60	344
Auburn, 5,415—De Kalb							
Dr. Bonnell M. Souder Hosp.	Gen	Indiv	26	14	7	158	467
Batesville, 3,065—Ripley							
Margaret Mary Hospital	Gen	Church	75	63	24	569	2,322
Bedford, 12,514—Lawrence							
Dunn Memorial Hospital	Gen	County	48	49	12	715	2,804
Beech Grove, 3,967—Marion							
St. Francis Hospital●▲	Gen	Church	140	100	50	2,087	6,211
Bloomington, 30,870—Monroe							
Bloomington Hospital○	Gen	NPAssn	75	48	25	834	2,980
Bluffton, 3,417—Wells							
Clinic Hospital●▲	Gen	Corp	75	61	8	140	2,033
Wells County Hospital	Gen	County	25	24	6	318	868
Clinton, 7,592—Vermillion							
Vermillion County Hospital	Gen	County	42	46	20	536	1,713
Columbus, 11,738—Bartholomew							
Bartholomew County Hosp.	Gen	County	75	62	20	934	2,551
Connersville, 12,806—Fayette							
Fayette Memorial Hospital	Gen	NPAssn	42	38	15	635	1,777
Crawfordsville, 11,080—Montgomery							
Montgomery County Culver Union Hospital▲	Gen	County	85	69	18	716	2,901
Crown Point, 4,643—Lake							
James O. Parramore Hosp.▲	TB	County	276	226	..	...	196
Decatur, 5,861—Adams							
Adams County Memorial Hospital	Gen	County	47	36	18	617	1,801
Dyer, 9.6—Lake							
Mount Mercy Sanitarium	N&M	Church	75	70	..	...	300
East Chicago, 54,837—Lake							
St. Catherine's Hospital●▲○	Gen	Church	264	207	60	1,851	8,800
Elkhart, 33,434—Elkhart							
Elkhart General Hospital▲	Gen	NPAssn	108	82	28	1,394	4,276
Elwood, 10,913—Madison							
Mercy Hospital	Gen	Church	45	36	18	762	1,858
Evansville, 97,063—Vanderburgh							
Boehne Tuberculosis Hosp.▲	TB	County	130	114			280
Clearview	N&M	Part	30	17	..	...	198
Evansville State Hospital	Ment	State	1,200	1,225	..	.	285
Protestant Deaconess Hospitals●▲○	Gen	Church	243	180	56	2,375	11,329
St. Mary's Hospital●▲○	Gen	Church	187	137	21	1,038	4,936
Welborn Memorial Baptist Hospitals○	Gen	Church	128	90	24	616	4,612
Fort Benjamin Harrison, Marion							
Veterans Admin. Hospital	Gen	Vet	500	313	..	..	3,330
Fort Wayne, 118,410—Allen							
Irene Byron Sanatorium▲	TB	Counties	254	232	..	...	380
Lutheran Hospital●▲○	Gen	Church	210	212	40	1,902	6,372
Methodist Hospital●○	Gen	Church	118	84	30	944	3,161
St. Joseph Hospital●▲○	Gen	Church	290	229	60	2,292	7,782
Frankfort, 13,706—Clinton							
Clinton County Hospital	Gen	County	43	38	14	661	1,801
Franklin, 6,504—Johnson							
Johnson County Memorial Hospital	Gen	County	68	...	15	Estab. 1947	
Garrett, 4,285—De Kalb							
Sacred Heart Hospital	Gen	Church	42	35	12	422	1,264
Gary, 11,720—Lake							
Methodist Hospital●▲○	Gen	Church	306	175	60	2,322	7,844
Patients' Hospital	Gen	Indiv	40	20	6	144	781
St. Mary's Mercy Hosp.●▲○	Gen	Church	216	164	70	2,064	7,641
Goshen, 11,372—Elkhart							
Goshen Hospital	Gen	NPAssn	84	62	12	825	1,600
Greencastle, 4,672—Putnam							
Putnam County Hospital	Gen	County	50	43	12	678	2,008
Greensburg, 6,665—Decatur							
Decatur County Memorial Hospital	Gen	County	80	33	16	432	1,460

Key to symbols and abbreviations is on page 1366

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INDIANA—Continued

Hospitals and Sanatoriums	Type of Service	Ownership or Control	Beds	Average Census †	Bassinets	Number of Births	Admissions †
Hammond, 70,184—Lake							
Mount Mercy Sanitarium	N&M	Church	35	27	..	....	226
St. Margaret Hospital♦♣♠	Gen	Church	200	206	60	2,000	10,383
Hartford City, 6,946—Blackford							
Blackford County Hospital	Gen	County	32	16	6	304	808
Huntingburg, 3,816—Dubois							
Stork Hospital	Gen	Indiv	26	22	16	526	1,196
Huntington, 12,983—Huntington							
Huntington County Hospital	Gen	County	48	45	24	765	1,647
Indianapolis, 386,972—Marion							
Central State Hospital♦♣	Ment	State	2,302	2,103	..	....	512
Emhardt Memorial Hospital	Gen	NPAssn	36	17	12	228	712
Flower Mission Memorial Hosp.	Unit of Indianapolis General Hospital						
Indianapolis General Hosp♦♣♠	Gen	Tb City	704	554	60	1,419	10,246
Indiana University Medical Center♦♣♠	Gen	State	584	529	62	1,716	9,985
James Whitcomb Riley Hospital for Children	Unit of Indiana University Medical Center						
Kiwanis Home	Unit of Indiana University Medical Center						
Methodist Hospital♦♣♠	Gen	Church	641	506	65	4,967	24,752
"Norways" Sanatorium♦	N&M	NPAssn	34	29	..	....	330
Public Health Center	Ven	City	112	48	..	....	1,900
Robert W. Long Hospital	Unit of Indiana University Medical Center						
Rotary Convalescent Home	Unit of Indiana University Medical Center						
St. Vincent's Hospital♦♣♠	Gen	Church	340	304	60	3,084	12,577
Sunnyside Sanatorium♦♣	TB	County	224	213	..	....	188
Veterans Admin. Hospital♦♣	Gen	Vet	345	332	..	....	4,669
William H. Coleman Hospital for Women	Unit of Indiana University Medical Center						
Jeffersonville, 11,465—Clark							
Clark County Memorial Hospital♣	Gen	County	91	57	25	735	2,695
Kendallville, 5,451—Noble							
McCray Memorial Hospital	Gen	City	52	18	12	471	1,717
Kokomo, 33,795—Howard							
St. Joseph Memorial Hosp.♣	Gen	Church	125	110	36	1,508	4,503
La Fayette, 28,730—Tippecanoe							
La Fayette Home Hosp.♦♣	Gen	NPAssn	132	103	25	1,047	4,775
St. Elizabeth Hospital♦♣♠	Gen	Church	300	250	50	1,221	9,217
William Ross Sanatorium	TB	County	27	23	..	....	40
La Porte, 16,180—La Porte							
Fairview Hospital	Gen	NPAssn	73	51	20	650	2,227
Holy Family Hospital	Gen	Church	110	81	20	694	3,436
Lebanon, 6,559—Boone							
Witham Memorial Hospital	Gen	County	70	43	22	695	1,902
Linton, 6,263—Greene							
Freeman Greene County Hosp.	Gen	County	50	32	12	708	2,253
Logansport, 20,177—Cass							
Logansport State Hosp.♦♣	Ment	State	2,405	2,250	..	....	315
Memorial Hospital♣	Gen	County	70	54	15	654	2,271
St. Joseph Hospital♣	Gen	Church	60	56	12	676	2,042
Madison, 6,925—Jefferson							
Kings Daughters Hospital	Gen	NPAssn	48	32	13	432	1,450
Marion, 28,767—Grant							
Marion General Hospital♣	Gen	NPAssn	101	80	30	1,525	4,444
Veterans Admin. Hospital	See Veterans Administration Hosp., Ind.						
Martinsville, 5,009—Morgan							
Morgan County Memorial Hospital	Gen	County	30	23	10	387	1,040
Michigan City, 36,476—La Porte							
Clinic Hospital♣	Gen	Corp	50	47	12	192	2,492
Indiana Hospital for Insane Criminals	Ment	State	345	340	..	....	343
Indiana State Prison Hosp.	Inst	State	175	50	..	....	798
St. Anthony's Hospital♣	Gen	Church	100	65	26	759	3,144
Warren Hospital	Gen	Corp	25	13	..	2	575
Mishawaka, 29,258—St. Joseph							
St. Joseph Hospital	Gen	Church	160	77	20	963	3,350
Mooresville, 1,979—Morgan							
Comer's Sanitarium	Proct	Indiv	22	16	..	....	214
Muncie, 49,739—Delaware							
Ball Memorial Hospital♦♣♠	Gen	NPAssn	217	192	50	2,316	8,469
New Albany, 25,414—Floyd							
St. Edward Hospital♣	Gen	Church	92	86	24	1,395	4,815
"Silvercrest" Southern Indiana Tuberculosis Hospital	TB	State	152	115	..	....	153
New Castle, 18,620—Henry							
Clinic Hospital	Gen	Part	22	6	4	131	1,194
Henry County Hospital♣	Gen	County	110	87	24	1,238	4,494
North Madison, 316—Jefferson							
Madison State Hospital	Ment	State	1,315	1,443	..	....	364
Oakland City, 3,068—Gibson							
Wood Hospital and Clinic	Gen	Indiv	12	4	6	228	309
Peru, 12,489—Miami							
Dukes Miami County Memorial Hospital	Gen	County	63	62	15	592	2,013
Wabash Railroad Employees Hospital♣	Gen	Indus	NPAssn	50	24	..	479
Plymouth, 5,715—Marshall							
Parkview Hospital	Gen	County	33	19	12	507	1,417
Portland, 6,362—Jay							
Jay County Hospital	Gen	County	35	42	10	456	1,766
Princeton, 7,766—Gibson							
Gibson General Hospital	Gen	NPAssn	45	35	15	569	1,892
Rensselaer, 3,214—Jasper							
Jasper County Hospital	Gen	County	41	44	10	467	1,651
Richmond, 35,147—Wayne							
Reid Memorial Hospital♣	Gen	NPAssn	144	124	24	1,844	5,973
Richmond State Hospital	Ment	State	1,747	1,639	..	....	340
Smith-Esteb Memorial Hosp.	TB	County	40	40	..	....	52
Rochester, 5,835—Fulton							
Woodlawn Hospital	Gen	County	29	24	16	366	1,199
Rockville, 2,968—Parke							
Indiana State Sanatorium	TB	State	300	179	..	....	164

INDIANA—Continued

Hospitals and Sanatoriums	Type of Service	Ownership or Control	Beds	Average Census †	Bassinets	Number of Births	Admissions †
Rome City, 504—Noble							
Kneipp Springs Sanatorium	Gen	Church	150	145	..	....	2,122
Rushville, 5,900—Rush							
Rushville City Hospital	Gen	City	12	9	7	459	772
Seymour, 8,620—Jackson							
Schneck Memorial Hospital	Gen	County	56	35	14	802	1,893
Shelbyville, 10,791—Shelby							
W. S. Major Hospital	Gen	City	57	35	18	729	2,168
South Bend, 101,268—St. Joseph							
Healthwin Hospital♦♣	TB	County	165	139	..	....	226
Memorial Hospital♦♣♠	Gen	NPAssn	220	192	45	2,674	7,913
St. Joseph's Hospital♣♠	Gen	Church	181	145	42	1,597	6,439
Sullivan, 5,077—Sullivan							
Mary Sherman Memorial Hospital	Gen	County	50	39	12	504	1,832
Tell City, 5,396—Perry							
Parkview Hospital	Gen	Indiv	14	4	12	154	649
Terre Haute, 62,638—Vigo							
Hoover's Sanatorium	Gen	Indiv	10	6	2	24	220
St. Anthony's Hospital♣♠	Gen	Church	145	151	40	1,528	5,725
Union Hospital♣♠	Gen	NPAssn	181	178	27	1,033	5,908
U. S. Penitentiary Hospital	Inst	USPHS	107	89	..	....	1,042
Tipton, 5,101—Tipton							
Emergency Hospital	Gen	Part	10	8	2	82	279
Union City, 3,555—Randolph							
Union City Hospital	Gen	Indiv	12	10	3	213	539
Valparaiso, 8,736—Porter							
Porter Memorial Hospital	Gen	County	50	57	20	756	2,460
Veterans Administration Hospital, 507—Grant							
Veterans Admin. Hospital♦♣	Ment	Vet	1,924	1,858	..	....	1,004
Vincennes, 18,228—Knox							
Good Samaritan Hospital	Gen	County	109	86	22	1,190	4,349
Hillcrest Tuberculosis Hosp.	TB	County	65	42	..	....	75
Wabash, 9,655—Wabash							
Wabash County Hospital	Gen	County	52	52	15	575	2,191
Warsaw, 6,278—Kosciusko							
McDonald Hospital	Gen	Indiv	40	30	12	495	1,748
Murphy Medical Center	Gen	Indiv	24	15	10	169	514
Washington, 9,318—Daviess							
Daviess County Hospital	Gen	County	105	81	15	719	3,495
Community Hospital	Gen	NPAssn	18	12	7	109	566
Winchester, 5,303—Randolph							
Randolph County Hospital	Gen	County	37	31	11	431	1,539
Wolflake, 250—Noble							
Lurkey Hospital	Gen	Indiv	15	12	8	280	679
Related Institutions							
Anderson, 41,572—Madison							
Citizens' Nursing Center	Gen	Part	13	10	4	115	1,044
Butlerville, 266—Jennings							
Muscatatuck State School	MeDe	State	1,400	1,371	..	....	114
Fort Wayne, 118,410—Allen							
Fort Wayne State School	MeDe	State	1,800	1,900	..	....	114
Grace Convalescent Hospital	Conv	Indiv	30	12	..	....	52
Greencastle, 4,872—Putnam							
Indiana State Farm Hospital	Inst	State	50	12	..	....	548
Greensburg, 6,065—Decatur							
Odd Fellow Home Hospital	Inst	NPAssn	75	49	..	....	98
Hammond, 70,184—Lake							
Kuhn Clinic Hospital	ENT	Part	10	3	..	....	1,376
La Fayette, 28,730—Tippecanoe							
Indiana State Soldiers' Home Hospital	Inst	State	112	54	..	....	356
Lagrange, 1,814—Lagrange							
Lagrange County Hospital	Gen	County	14	11	..	....	317
Martinsville, 5,009—Morgan							
Home Lawn Mineral Springs	Conv	Corp	150	120	..	....	4,208
Martinsville Sanitarium	Conv	Corp	120	68	..	....	3,105
New Castle, 18,620—Henry							
Indiana Village for Epileptics	Epil	State	1,035	987	..	....	67
Pendleton, 1,681—Madison							
Indiana State Reformatory Hospital	Inst	State	66	39	..	....	1,157
Plainfield, 1,811—Hendricks							
Indiana Boys' School Hosp.	Inst	State	25	1	..	....	177

IOWA

Hospitals and Sanatoriums	Type of Service	Ownership or Control	Beds	Average Census †	Bassinets	Number of Births	Admissions †
Akron, 1,314—Plymouth							
Akron Hospital	Gen	Indiv	14	7	3	107	308
Albia, 3,157—Monroe							
Smith Hospital	Gen	Indiv	22	7	5	133	445
Algona, 4,954—Kossuth							
Kossuth Hospital	Gen	Indiv	24	12	6	298	663
Alta, 1,389—Buena Vista							
Alta Community Hospital	Gen	NPAssn	10	7	5	38	254
Ames, 12,555—Story							
Iowa State College Hospital♣	Inst	State	75	10	..	....	969
Anamosa, 4,695—Jones							
Mercy Hospital	Gen	Church	35	25	10	284	989
Atlantic, 5,932—Cass							
Atlantic Memorial Hospital	Gen	NPAssn	50	31	12	291	1,819
Battle Creek, 827—Ida							
Battle Creek Hospital	Gen	Part	10	7	6	69	294
Bellevue, 1,771—Jackson							
Bellevue Memorial Hospital	Gen	Church	25	..	7	Estab. 1947	
Belmond, 2,109—Wright							
Steele Memorial Hospital	Gen	Indiv	13	11	7	167	617

Key to symbols and abbreviations is on page 1386

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IOWA—Continued

Hospitals and Sanatoriums	Type of Service	Ownership or Control	Beds	Average Census †	Bassinets	Number of Births	Admissions †
Buffalo Center, 911—Winnebago							
Dolmage Hospital	Gen	Part	14	10	8	196	391
Burlington, 25,832—Des Moines							
Burlington Protestant Hospital◇	Gen	NPAssn	105	100	30	666	4,095
Mercy Hospital◇	Gen	Church	100	90	25	517	3,197
St. Francis Hospital	Gen	Church	65	40	15	301	1,372
Carroll, 5,580—Carroll							
St. Anthony Hospital◇	Gen	Church	115	102	35	942	4,074
Cedar Falls, 9,249—Black Hawk							
Sartori Memorial Hospital◇	Gen	City	45	30	10	454	1,309
Cedar Rapids, 62,120—Linn							
Mercy Hospital◇◇	Gen	Church	185	146	32	1,254	6,876
St. Luke's Methodist Hospital◇◇	Gen	Church	170	171	32	1,472	7,371
Centerville, 5,413—Appanoose							
St. Joseph's Mercy Hospital◇	Gen	Church	46	38	12	524	2,431
Chariton, 5,754—Lucas							
Yocom Hospital	Gen	Indiv	25	23	10	300	755
Charles City, 5,686—Floyd							
Cedar Valley Hospital	Gen	City	60	56	20	626	2,756
Cherokee, 7,468—Cherokee							
Cherokee State Hospital	Ment	State	1,735	1,668	..	...	335
Sioux Valley Hospital◇	Gen	NPAssn	35	30	12	609	2,075
Clarinda, 4,965—Page							
Clarinda Municipal Hospital	Gen	City	44	33	13	323	1,500
Clarinda State Hospital	Ment	State	1,170	1,547	..	...	375
Clarion, 3,971—Wright							
Clarion General Hospital and Clinic	Gen	Part	17	9	9	175	365
Clinton, 26,270—Clinton							
Jane Lamb Memorial Hosp.◇◇	Gen	NPAssn	100	84	16	544	3,106
St. Joseph Mercy Hospital◇	Gen	Church	95	82	30	697	2,762
Colfax, 2,252—Jasper							
Colfax Sanitarium	Gen	Corp	18	10	1	36	291
Council Bluffs, 41,439—Pottawattamie							
Jennie Edmundson Memorial Hospital◇◇	Gen	NPAssn	136	135	20	1,231	5,364
Mercy Hospital◇◇	Gen	Church	150	128	22	791	4,386
St. Bernard's Hospital◇◇	N&M	Church	180	177	..	...	702
Creston, 5,536—Howard							
St. Joseph Mercy Hospital	Gen	Church	28	16	10	223	1,110
Davenport, 66,009—Scott							
Mercy Hospital◇◇	Gen	Church	225	173	60	1,895	7,846
Pine Knoll Sanatorium	TB	County	75	47	..	...	92
St. Elizabeth's and St. John's Hospitals	Units of Mercy Hospital						
St. Luke's Hospital◇	Gen	Church	92	102	22	834	4,110
Decorah, 5,385—Winneshiek							
Decorah Hospital◇	Gen	Church	52	38	13	448	1,560
Denison, 4,561—Crawford							
Denison Hospital	Gen	Indiv	21	16	12	314	1,009
Des Moines, 159,819—Polk							
Broadlawns Polk County Hospital◇◇	Genlso	County	286	197	20	263	4,722
Broadlawns Polk County Hospital◇	TB	County	87	69	..	...	111
Iowa Lutheran Hospital◇◇	Gen	Church	135	137	20	937	4,644
Iowa Methodist Hospital◇◇	Gen	Church	282	256	52	2,285	10,806
Mercy Hospital◇◇	Gen	Church	190	184	30	1,641	7,812
Raymond Blank Memorial Hospital for Children◇	Unit of Iowa Methodist Hospital						
Retreat Hospital	N&M	Corp	30	48	..	...	260
Veterans Admin. Center◇◇	Gen	Vet	452	404	..	...	4,795
Dexter, 769—Dallas							
Clinic Hospital	Gen	Part	20	19	7	118	625
Dubuque, 43,892—Dubuque							
Finley Hospital◇	Gen	NPAssn	128	91	22	772	3,539
St. Joseph Mercy Hospital◇	Gen	Church	408	133	35	1,179	5,567
St. Joseph Sanitarium◇	N&M	Church	250	230	..	...	768
Sunny Crest Sanatorium◇◇	TB	County	70	44	..	...	59
Emmetsburg, 3,672—Palo Alto							
Emmetsburg Hospital	Gen	NPAssn	23	24	11	280	1,315
Estherville, 5,651—Emmet							
Holy Family Hospital	Gen	Church	41	33	10	377	2,227
Forest City, 2,845—Winnebago							
Forest City Municipal Hosp.	Gen	City	20	13	8	226	676
Fort Dodge, 22,504—Webster							
Lutheran Hospital◇	Gen	Church	130	106	25	1,056	5,939
St. Joseph Mercy Hospital◇◇	Gen	Church	125	111	30	662	4,396
Fort Madison, 14,063—Lee							
Atchison, Topeka and Santa Fe Railway Employees' Hosp.	Indus	NPAssn	40	No data supplied			
Sacred Heart Hospital	Gen	Church	72	49	18	556	2,977
Grinnell, 5,210—Poweshiek							
Community Hospital	Gen	NPAssn	40	29	13	306	1,450
St. Francis Hospital	Gen	Church	35	33	10	221	1,178
Hamburg, 2,187—Fremont							
Hamburg Hospital	Gen	Indiv	30	29	10	266	1,360
Hampton, 4,026—Franklin							
Lutheran Hospital◇	Gen	Church	30	28	16	411	1,480
Hartley, 1,308—O'Brien							
Hand Hospital	Gen	Part	12	5	5	135	370
Hull, 1,072—Sioux							
Hull Hospital	Gen	Corp	15	9	5	81	546
Independence, 4,342—Buchanan							
Independence State Hospital	Ment	State	1,867	1,730	..	...	468
Peoples Hospital	Gen	NPAssn	32	31	10	304	1,139
Iowa City, 17,182—Johnson							
Children's Hospital	Unit of University Hospitals						
Iowa State Psychopathic Hospital◇	Ment-St	State	60	42	..	...	205
Mercy Hospital◇◇	Gen	Church	140	124	31	848	4,620
University Hospitals◇◇◇	Gen	State	900	655	50	1,047	18,304

IOWA—Continued

Hospitals and Sanatoriums	Type of Service	Ownership or Control	Beds	Average Census †	Bassinets	Number of Births	Admissions †
Keokuk, 15,676—Lee							
Graham Hospital	Gen	NPAssn	65	65	19	698	2,537
St. Joseph's Hospital	Gen	Church	140	115	25	506	3,021
Knoxville, 6,936—Marion							
Collins Memorial Hospital	Gen	Part	30	21	10	244	1,345
Veterans Admin. Hospital◇	Ment	Vet	1,940	1,693	..	...	638
Lake City, 2,716—Calhoun							
McCrary-Rost Hospital	Gen	Part	15	10	8	123	422
McVay Memorial Hospital	Gen	Part	18	10	6	119	563
Lemars, 5,353—Plymouth							
Sacred Heart Hospital◇	Gen	Church	50	39	15	570	2,107
Leon, 2,307—Decatur							
Decatur County Hospital	Gen	County	23	24	11	294	1,110
Marshalltown, 19,240—Marshall							
Evangelical Deaconess Home and Hospital◇	Gen	Church	150	131	22	707	4,072
St. Thomas Mercy Hospital◇	Gen	Church	102	85	20	499	2,350
Mason City, 27,080—Cerro Gordo							
Park Hospital◇	Gen	Corp	56	44	15	329	1,845
St. Joseph's Mercy Hospital◇◇	Gen	Church	197	165	42	1,114	6,412
McGregor, 1,309—Clayton							
McGregor Hospital	Gen	Indiv	12	6	4	60	177
Monticello, 2,546—Jones							
John McDonald Hospital	Gen	NPAssn	45	30	10	233	1,378
Mount Pleasant, 4,610—Henry							
Mount Pleasant State Hosp.	Ment	State	1,602	1,547	..	...	351
Muscatine, 16,296—Muscatine							
Bellevue Hospital	Gen	NPAssn	45	41	15	353	2,578
Benjamin Hershey Memorial Hospital	Gen	NPAssn	50	45	14	482	1,814
New Hampton, 2,932—Chickasaw							
St. Joseph's Hospital◇	Gen	Church	52	40	12	323	1,910
Newton, 10,462—Jasper							
Skiff Memorial Hospital◇	Gen	City	52	39	10	409	1,699
Oakdale, —Johnson							
State Sanatorium◇◇	TB	State	425	401	..	...	312
Oelwein, 7,801—Fayette							
Mercy Hospital	Gen	Church	44	37	15	497	2,807
Onawa, 3,438—Monona							
Onawa Hospital	Gen	Indiv	23	12	6	52	676
Orange City, 1,909—Sioux							
Grossmann Hospital	Gen	Part	15	10	5	146	556
Osceola, 3,281—Clarke							
Harken Hospital	Gen	Indiv	26	13	5	47	646
Osceola Hospital	Gen	Indiv	30	21	8	273	1,409
Oskaloosa, 11,074—Mahaska							
Mercy Hospital	Gen	Part	32	24	12	300	1,923
Ottumwa, 31,570—Wapello							
Ottumwa Hospital	Gen	NPAssn	53	48	12	400	1,970
St. Joseph Hospital◇	Gen	Church	118	120	20	678	4,900
Sunnyslope Sanatorium	TB	County	18	17	..	...	6
Perry, 5,977—Dallas							
Kings Daughters Hospital	Gen	NPAssn	35	22	11	283	992
Pleasantville, 895—Marion							
Community Hospital	Gen	Indiv	10	4	2	43	132
Red Oak, 5,763—Montgomery							
Murphy Memorial Hospital◇	Gen	City	36	24	12	282	1,224
Rock Rapids, 2,356—Lyon							
Vander Wilt Hospital	Gen	Indiv	20	7	5	119	425
Sheldon, 3,768—O'Brien							
Good Samaritan Hospital	Gen	Church	16	4	8	224	675
Shenandoah, 6,840—Page							
Henry and Catherine L. Hand Memorial Hospital	Gen	NPAssn	40	31	7	366	1,745
Sibley, 2,356—Osceola							
Osceola Hospital	Gen	Corp	25	14	12	266	971
Sigourney, 2,354—Keokuk							
Sigourney Hospital	Gen	Indiv	18	11	9	121	334
Sioux City, 82,564—Woodbury							
Lutheran Hospital◇	Gen	Church	86	92	15	587	3,344
Methodist Hospital◇	Gen	Church	110	113	15	721	4,415
St. Joseph Mercy Hosp.◇◇	Gen	Church	250	216	56	1,170	8,841
St. Vincent's Hospital◇◇	Gen	Church	140	145	18	769	7,261
Spencer, 6,590—Clay							
Spencer Municipal Hospital	Gen	City	25	25	9	461	1,490
Spirit Lake, 3,161—Dickinson							
Marcus Snyder Memorial Hospital	Gen	Part	24	21	6	206	1,147
Storm Lake, 5,274—Buena Vista							
Porath Hospital	Gen	Indiv	12	13	7	449	660
Vinton, 4,165—Benton							
Virginia Gay Hospital	Gen	City	40	28	10	279	779
Washington, 5,227—Washington							
Washington County Hosp.◇	Gen	County	54	36	12	516	1,564
Waterloo, 51,743—Black Hawk							
Allen Memorial Hospital◇	Gen	NPAssn	83	78	30	1,342	4,146
Presbyterian Hospital	Gen	NPAssn	46	42	10	321	2,167
St. Francis Hospital◇	Gen	Church	174	108	25	1,081	4,736
Waverly, 4,156—Bremer							
St. Joseph Mercy Hospital◇	Gen	Church	52	28	17	388	1,176
West Union, 2,669—Fayette							
West Union Community Hosp.	Gen	City	15	13	6	187	498
Williamsburg, 1,308—Iowa							
Miller Hospital	Gen	Indiv	8	5	5	110	281
Related Institutions							
Davenport, 66,009—Scott							
Isolation Hospital	Iso	County	26	6	1	9	291
Des Moines, 159,819—Polk							
Junior League Convalescent Home for Children	Conv	NPAssn	18	13	..	...	51
Salvation Army Booth Memorial Hospital	Mat	Church	50	38	15	131	148

Key to symbols and abbreviations is on page 1396

IOWA—Continued

Related Institutions	Type of Service	Ownership or Control	Beds	Average Census †	Bassinets	Number of Births	Admissions †
Eldora, 3,553—Hardin							
Iowa Training School for Boys Hospital	Inst	State	30	2	..	....	422
Glenwood, 4,501—Mills							
Glenwood State School	MeDe	State	1,920	1,860	..	....	122
Marshalltown, 19,240—Marshall							
Iowa Soldiers' Home Hosp.	Inst	State	140	91	..	....	190
Orange City, 1,920—Sioux							
Doonink Hospital	Gen	Indiv	15	7	4	65	329
Postville, 1,194—Allamakee							
Postville Community Hosp.	Gen	City	18	15	6	168	450
Red Oak, 5,763—Montgomery							
Powell School	MeDe	Indiv	65	69	..	....	15
Sac City, 2,165—Sac							
Loring Hospital	Gen	NPAsen	11	7	6	160	266
Sioux City, 82,264—Woodbury							
Florence Crittenton Home	Mat	NPAsen	35	25	40	66	101
Toledo, 2,075—Tama							
State Juvenile Home Hosp.	Inst	State	25	4	..	....	125
Woodward, 805—Dallas							
Hospital for Epileptics and School for Feebleminded	MeDe	State	1,700	1,661	..	....	124

KANSAS

Hospitals and Sanatoriums	Type of Service	Ownership or Control	Beds	Average Census †	Bassinets	Number of Births	Admissions †
Abilene, 5,671—Dickinson							
Dickinson County Memorial Hospital	Gen	NPAsen	30	19	12	220	1,189
Anthony, 2,873—Harper							
Galloway Hospital	Gen	Indiv	37	16	7	135	785
Arkansas City, 12,552—Cowley							
Mercy Hospital	Gen	NPAsen	62	14	18	428	1,848
Atchison, 17,646—Atchison							
Atchison Hospital	Gen	NPAsen	45	30	14	383	1,305
Axtell, 505—Marshall							
Axtell Hospital	Gen	Indiv	12	6	5	92	379
Belleville, 2,580—Republic							
Belleville Hospital	Gen	Indiv	28	17	6	169	635
Beloit, 3,765—Mitchell							
Community Hospital△	Gen	NPAsen	52	33	11	403	1,629
Caldwell, 1,562—Sumner							
Caldwell General Hospital	Gen	Part	20	5	5	61	366
Chanute, 10,142—Neosho							
Johnson Hospital	Gen	Corp	50	33	9	335	1,316
Clay Center, 4,518—Clay							
Clay Center Municipal Hosp.	Gen	City	29	21	6	328	1,020
Coffeyville, 17,355—Montgomery							
Medical Center Hospital	Gen	NPAsen	18	13	7	350	542
Southeast Kansas Hosp.	Gen	NPAsen	25	19	10	402	1,980
Colby, 2,456—Thomas							
St. Thomas Hospital	Gen	Church	32	20	13	331	1,820
Concordia, 6,255—Cloud							
St. Joseph's Hospital△	Gen	Church	97	88	22	494	3,525
Dodge City, 8,467—Ford							
Murray Memorial Hospital	Gen	Indiv	54	47	15	312	1,772
St. Anthony Hospital△	Gen	Church	70	58	22	438	3,198
El Dorado, 10,045—Butler							
Susan B. Allen Memorial Hospital△	Gen	NPAsen	60	40	14	499	2,275
Ellsworth, 2,227—Ellsworth							
Ellsworth County Veterans Memorial Hospital	Gen	NPAsen	45	34	9	240	1,177
Emporia, 15,198—Lyon							
Newman Memorial County Hospital△	Gen	County	85	87	30	506	3,072
St. Mary's Hospital△	Gen	Church	65	51	18	345	1,974
Fort Leavenworth, 4,962—Leavenworth							
Station Hospital△	Gen	Army	100	58	18	171	2,194
Station Hospital, U. S. Disciplinary Barracks	Gen	Army	100	45	..	....	714
Fort Riley, —Geary							
Station Hospital△	Gen	Army	515	87	13	185	2,621
Fort Scott, 10,577—Bourbon							
Mercy Hospital△	Gen	Church	110	99	18	544	3,617
Garden City, 6,285—Finney							
St. Catherine's Hospital△	Gen	Church	68	60	17	594	3,170
Gardner, 510—Johnson							
Breen Hospital	Gen	Indiv	17	12	6	184	367
Girard, 2,554—Crawford							
Girard General Hospital	Gen	City	25	14	5	117	552
Goessel, 300—Marion							
Mennonite Bethesda Hospital	Gen	NPAsen	17	10	8	109	688
Goodland, 3,306—Sherman							
Boothroy Memorial Hospital	Gen	Church	27	24	11	300	1,793
Great Bend, 9,044—Barton							
St. Rose Hospital△	Gen	Church	135	115	24	1,069	4,875
Halstead, 1,367—Harvey							
Halstead Hospital△	Gen	Church	160	140	8	75	4,033
Harper, 1,405—Harper							
Joslin Hospital	Gen	Indiv	10	7	4	63	231
Hays, 6,285—Ellis							
Hadley Memorial Hospital	Gen	Church	40	30	11	170	1,454
St. Anthony's Hospital△	Gen	Church	110	114	25	602	3,730
Hillsboro, 1,380—Marion							
Salem Hospital	Gen	Church	20	14	8	139	560
Hoisington, 3,719—Barton							
Hoisington Hospital	Gen	NPAsen	15	7	4	53	341
Holton, 2,885—Jackson							
Holton Hospital	Gen	NPAsen	22	16	6	189	670
Horton, 2,872—Brown							
Horton Hospital	Gen	Part	30	22	13	258	970

KANSAS—Continued

Hospitals and Sanatoriums	Type of Service	Ownership or Control	Beds	Average Census †	Bassinets	Number of Births	Admissions †
Hutchison, 30,013—Reno							
Grace Hospital△○	Gen	Church	140	126	30	744	4,748
St. Elizabeth Mercy Hosp.△○	Gen	Church	65	58	20	557	2,186
Independence, 11,265—Montgomery							
Mercy Hospital△○	Gen	Church	72	62	20	576	2,241
Iola, 7,244—Allen							
St. John's Hospital	Gen	Church	35	23	12	377	1,136
Junction City, 8,507—Geary							
Junction City Municipal Hosp.	Gen	City	67	55	20	363	1,981
Kansas City, 121,458—Wyandotte							
Bell Memorial Hospital	Unit of University of Kansas Hospitals						
Bethany Hospital△○	Gen	Church	150	132	30	835	5,061
Douglass Hospital	Gen	Church	50	21	14	121	644
Providence Hospital△○	Gen	Church	135	120	35	1,024	5,154
St. Margaret's Hospital△○△	Gen	Church	203	144	25	602	5,050
University of Kansas Hospitals△○△	Gen	State	370	320	30	1,007	8,402
Larned, 3,532—Pawnee							
Larned State Hospital	Ment	State	1,560	1,527	..	....	237
Lawrence, 14,390—Douglas							
Haskell Institute Hospital	Inst	IA	40	2	..	....	201
Lawrence Memorial Hospital	Gen	City	72	58	25	929	4,858
Watkins Memorial Hosp.△	Inst	State	62	19	..	....	1,338
Leavenworth, 19,220—Leavenworth							
Cushing Memorial Hosp.△○	Gen	NPAsen	60	43	15	389	1,810
St. John's Hospital△○	Gen	Church	65	53	12	297	1,491
U. S. Penitentiary Hospital△	Inst	USPHS	215	65	..	....	1,426
Liberal, 4,410—Seward							
Epworth Hospital	Gen	Church	38	40	16	427	1,503
Little River, 633—Rice							
Hoffman Memorial Hospital	Gen	City	16	4	3	22	107
Lyons, 4,497—Rice							
Lyons Hospital	Gen	NPAsen	20	10	6	140	604
Manhattan, 11,659—Riley							
St. Mary Hospital△○	Gen	Church	98	79	25	720	2,825
Marion, 2,096—Marion							
Marion Hospital	Gen	NPAsen	10	5	4	83	262
Marysville, 4,055—Marshall							
Marysville Hospital	Gen	Indiv	12	6	6	122	251
Randell Hospital	Gen	Indiv	16	6	6	114	390
McPherson, 7,194—McPherson							
McPherson County Hospital	Gen	County	53	53	12	400	1,607
Neodesha, 3,326—Wilson							
Wilson County Hospital	Gen	County	30	18	10	214	801
Newton, 11,047—Harvey							
Axtell Christian Hospital△○	Gen	Church	50	33	14	168	1,804
Bethel Deaconess Hospital△○	Gen	Church	78	70	14	447	2,981
Norton, 2,762—Norton							
Kenney Memorial Hospital	Unit of State Sanatorium for Tuberculosis						
Norton County Hospital	Gen	County	21	16	11	291	192
State Sanatorium for Tuberculosis△	TB	State	411	379	..	10	371
Oberlin, 1,878—Decatur							
Benton Memorial Hospital	Gen	Part	22	9	8	108	452
Osawatomie, 4,145—Miami							
Osawatomie State Hospital	Ment	State	1,715	1,702	..	....	251
Ottawa, 10,195—Franklin							
Ransom Memorial Hospital	Gen	County	38	36	14	492	1,658
Parsons, 14,294—Labette							
Mercy Hospital△○	Gen	Church	75	45	22	549	2,290
Missouri-Kansas-Texas Railroad Employes' Hospital	Indus	NPAsen	50	20	..	....	600
State Hospital for Epileptics	Epil	State	865	710	..	....	60
Pittsburg, 17,571—Crawford							
Mount Carmel Hospital△○	Gen	Church	80	80	12	781	3,449
Pratt, 6,501—Pratt							
Shinnecah Hospital	Gen	Corp	28	19	10	260	1,835
Quinter, 461—Gove							
Quinter Community Hospital	Gen	NPAsen	8	8	6	146	510
Russell, 4,819—Russell							
Russell City Hospital	Gen	City	24	18	12	267	1,105
Sabetha, 2,241—Nemaha							
St. Anthony Municipal Memorial Hospital△○	Gen	Church	50	36	12	199	1,613
Salina, 21,073—Saline							
Asbury Hospital△○	Gen	Church	80	69	20	496	2,241
St. John's Hospital△○	Gen	Church	85	74	20	597	2,716
Station Hospital	Gen	Army	100	67	6	126	542
Seneca, 2,015—Nemaha							
Seneca Hospital	Gen	Church	23	18	12	156	853
Stafford, 2,011—Stafford							
Stafford City Hospital	Gen	City	30	20	10	175	677
Syracuse, 1,256—Hamilton							
Donohue Memorial Hospital	Gen	County	22	15	12	126	438
Topeka, 67,833—Shawnee							
Atchison, Topeka and Santa Fe Railway Hospital△	Indus	NPAsen	140	102	..	....	3,200
Christ's Hospital△○	Gen	NPAsen	100	94	25	1,104	4,665
Jane C. Stormont Hospital△○	Gen	NPAsen	84	69	30	788	2,934
Menninger Sanitarium○△	Ner	N&M	60	54	..	....	86
St. Francis Hospital△○	Gen	Church	301	80	36	870	2,806
Security Benefit Clinic and Hospital	Gen	NPAsen	165	92	..	....	3,316
Station Hospital	Gen	Army	25	3	..	....	524
Topeka State Hospital	Ment	State	1,665	1,628	..	....	346
Veterans Admin. Hospital○△	Ment	Vet	1,400	903	..	....	4,310
Wadsworth, 2,300—Leavenworth							
Veterans Admin. Hospital○△	Gen	Vet	1,017	853	..	....	7,440
Wamego, 1,762—Pottawatomie							
Genn Hospital	Gen	City	12	7	8	147	445
Wellington, 7,246—Sumner							
Hatcher Hospital	Ger	NPAsen	23	11	5	41	615
St. Luke's Hospital	Gen	City	35	30	9	214	1,220

Key to symbols and abbreviations is on page 1396

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KANSAS—Continued

Hospitals and Sanatoriums	Type of Service	Ownership or Control	Beds	Average Census †	Bassinets	Number of Births	Admissions †
Wichita, 114,966—Sedgwick							
Coffman Hospital	Gen	Corp	10	1	2	1	160
St. Francis Hospital●◆◇	Gen	Church	380	350	70	2,300	13,155
St. Joseph's Hospital◇	Gen	Church	116	103	..	...	3,011
Sedgwick County Hospital	Gen	County	66	53	6	93	534
Sedgwick County Tuberculosis Sanitarium	TB	County	40	20	..	...	29
Veterans Admin. Hospital▲	Gen	Vet	256	251	..	...	3,034
Wesley Hospital●◆◇	Gen	Church	325	279	54	1,814	9,564
Wichita Hospital●◇	Gen	Church	140	115	25	950	5,702
Winfield, 9,586—Cowley							
St. Mary's Hospital◇	Gen	Church	69	42	9	204	1,578
William Newton Memorial Hospital◇	Gen	City	53	55	10	309	2,310
Related Institutions							
Ashland, 1,186—Clark							
Ashland Hospital	Gen	NPAssn	11	4	4	88	290
Fort Dodge, 550—Ford							
Kansas State Soldiers' Home Hospital	Inst	State	32	6	..	...	131
Lansing, 812—Leavenworth							
Kansas State Penitentiary Hospital	Inst	State	55	10	..	...	584
Manhattan, 11,620—Riley							
Kansas State College Hosp.	Inst	State	60	10	..	...	857
St. Francis, 1,041—Cheyenne							
St. Francis Hospital	Gen	Indiv	28	13	8	138	800
Topeka, 67,853—Shawnee							
Florence Crittenton Home	Mat	NPAssn	29	10	16	36	45
Wichita, 114,966—Sedgwick							
Booth Memorial Hospital	Mat	Church	50	28	30	123	133
Suburban Rest Sanitarium	N&M	Part	40	26	..	...	70
Winfield, 9,586—Cowley							
State Training School	MeDe	State	1,331	1,327	..	...	100

KENTUCKY

Hospitals and Sanatoriums	Type of Service	Ownership or Control	Beds	Average Census †	Bassinets	Number of Births	Admissions †
Albany, 1,259—Clinton							
Maple Hill Hospital	Gen	Indiv	13	6	6	213	489
Anchorage, 629—Jefferson							
Pleasant Grove Hospital	N&M	NPAssn	63	46	..	...	614
Ashland, 29,537—Boyd							
Federal Correctional Institution	Inst	USPHS	31	15	..	...	494
Kings Daughters Hospital	Gen	NPAssn	130	102	35	1,537	5,135
Barbourville, 2,429—Knox							
Knox Hospital	Gen	Part	22	10	7	127	579
Berea, 2,126—Madison							
Berea College Hospital◇	Gen	NPAssn	120	33	8	329	2,332
Beverly, 306—Bell							
Red Bird Evangelical Hosp.	Gen	Church	11	4	4	57	189
Bowling Green, 14,585—Warren							
City Hospital	Gen	City	55	44	14	785	2,652
Camp Campbell, Christian							
Station Hospital	Gen	Army	75	76	7	107	2,118
Corbin, 7,893—Whitley							
Smith Hospital	Gen	Indiv	38	18	9	247	1,076
Covington, 67,018—Kenton							
Covington-Kenton County Tuberculosis Sanatorium	TB	County	17	17	..	...	36
St. Elizabeth Hospital●◆◇	Gen	Church	398	256	56	2,161	8,439
Wm. Booth Memorial Hosp.▲	Gen	Church	104	97	50	1,490	3,708
Cynthiana, 4,840—Harrison							
Harrison Memorial Hospital	Gen	NPAssn	38	25	12	350	908
Danville, 6,734—Boyle							
Ephraim McDowell Memorial Hospital	Gen	NPAssn	76	67	24	624	3,067
Kentucky State Hospital	Ment	State	1,200	744	..	...	1,072
Dayton, 8,379—Campbell							
Speers Memorial Hospital◇	Gen	County	100	80	18	813	2,731
Fort Knox,—Hardin							
Station Hospital▲	Gen	Army	1,064	464	32	516	10,286
Frankfort, 11,402—Franklin							
Kings Daughters Hospital	Gen	NPAssn	75	60	16	547	2,991
Frenchburg, 289—Menifee							
Jane Cook Hospital	Gen	Church	15	5	5	53	335
Fulton, 3,386—Fulton							
Fulton Hospital	Gen	Corp	51	27	6	200	1,200
Georgetown, 4,420—Scott							
John Graves Ford Memorial Hospital	Gen	Corp	53	25	11	270	1,201
Glasgow, 5,815—Barren							
T. J. Samson Community Hospital▲	Gen	NPAssn	80	77	16	748	4,561
Grayson, 1,176—Carter							
J. Q. Stovall Memorial Hosp.	Gen	Corp	18	14	12	151	811
Greenville, 2,347—Muhlenberg							
Muhlenberg Community Hosp.	Gen	NPAssn	54	42	12	620	2,657
Harlan, 5,122—Harlan							
Harlan Hospital	Gen	Corp	75	45	10	230	3,658
Harrodsburg, 4,673—Mercer							
A. D. Price Memorial Hosp.	Gen	NPAssn	23	17	10	288	1,076
Hazard, 7,297—Perry							
Hurst-Snyder Hospital	Gen	Corp	25	18	6	167	1,224
Henderson, 13,160—Henderson							
Henderson Hospital	Gen	Fed	80	60	20	580	2,031
Hopkinsville, 11,794—Christian							
Jennie Stuart Memorial Hosp.	Gen	NPAssn	65	67	18	437	3,374
Western State Hospital	Ment	State	1,900	1,767	..	...	446
Hyden, 500—Leslie							
Hyden Hospital	Gen	NPAssn	19	14	8	199	586
Jenkins, 9,428—Letcher							
Jenkins Hospital	Gen	Indiv	55	30	5	81	1,290
La Grange, 1,234—Oldham							
Mallory Taylor Memorial Hospital	Gen	City	24	15	8	300	1,000
Lakeland, 55—Jefferson							
Central State Hospital	Ment	State	2,477	2,240	..	...	549
Lebanon, 3,786—Marion							
Mary Immaculate Infirmary	Gen	Church	33	27	12	669	1,786
Lexington, 49,304—Fayette							
Eastern State Hospital	Ment	State	2,000	1,822	..	...	621
Good Samaritan Hospital▲◇	Gen	Church	285	226	55	1,521	8,013
Julius Marks Sanatorium◇	TB	County	115	105	..	...	176
St. Joseph Hospital●◆◇	Gen	Church	276	261	40	1,581	11,532
Shriners Hospital for Crippled Children▲	Orth	NPAssn	25	20	..	...	57
U. S. Public Health Service Hospital◆◇	DrugMent	USPHS	1,440	1,241	..	...	2,430
Veterans Admin. Hospital▲◇	Ment	Vet	1,220	806	..	...	1,982
London, 2,263—Laurel							
Marymount Hospital	Gen	NPAssn	35	...	10	...	...
Louisa, 1,025—Lawrence							
Riverview Hospital	Gen	Indiv	16	7	8	191	689
Louisville, 319,077—Jefferson							
Children's Free Hospital▲◇	Chil	NPAssn	75	45	..	...	1,597
Jewish Hospital●▲	Gen	NPAssn	85	76	15	570	5,394
Kentucky Baptist Hosp.●◆◇	Gen	Church	190	175	40	1,563	7,014
Kentucky Treatment Center	Ven	State	150	90	..	...	3,304
Kosair Crippled Children Hospital▲	Orth	NPAssn	100	94	..	...	223
Louisville General Hosp.●◆▲◇	Gen	CyCo	267	213	43	1,490	8,653
Methodist Deaconess Hosp.▲◇	Gen	Church	85	80	12	631	3,170
Norton Memorial Infirmary●▲◇	Gen	NPAssn	157	144	30	1,251	6,195
Red Cross Hospital	Gen	NPAssn	57	35	10	176	1,102
St. Anthony's Hospital●▲◇	Gen	Church	145	137	31	1,206	5,413
St. Joseph's Infirmary●◆▲◇	Gen	Church	350	306	50	2,561	11,958
St. Mary and Elizabeth Hospital●▲◇	Gen	Church	202	161	65	2,800	7,806
State Tuberculosis Sanatorium (Hazlewood)	TB	State	108	106	..	...	142
Stokes Sanitarium	N&M	Indiv	40	15	..	...	138
Veterans Admin. Hospital●▲	Gen	Vet	961	736	..	...	8,712
Lynch, 10,000—Harlan							
Lynch Hospital	Gen	NPAssn	55	17	8	216	1,218
Madisonville, 8,300—Hopkins							
Hopkins County Hosp.tal	Gen	NPAssn	70	45	14	577	2,254
Marion, 2,965—Crittenden							
Crittenden County Hospital	Gen	NPAssn	23	15	9	276	490
Mayfield, 5,619—Graves							
Fuller-Gilliam Hospital	Gen	Corp	35	24	8	335	1,500
Mayfield Hospital	Gen	NPAssn	40	20	10	150	700
Maysville, 6,573—Mason							
Hayswood Hospital	Gen	NPAssn	65	70	14	724	3,133
Middlesboro, 11,777—Bell							
Middlesboro Hospital	Gen	Corp	60	44	12	341	2,184
Morganfield, 3,079—Union							
Our Lady of Mercy Hospital	Gen	Church	35	13	7	130	721
Oneida, 300—Clay							
Oneida Maternity Hospital	Mat	State	25	13	20	425	622
Outwood, 50—Christian							
Veterans Admin. Hospital▲	TB	Vet	376	303	..	...	1,075
Owensboro, 30,245—Daviess							
Owensboro-Daviess County Hospital◇	Gen	CyCo	150	112	25	1,357	5,739
Paducah, 33,765—McCracken							
Ewart Purcell Isolation Hospital	Unit of Riverside Hospital						
Illinois Central Hospital▲	Indus	NPAssn	50	46	..	...	...
Riverside Hospital▲	Gen	City	114	86	28	1,238	4,900
Paintsville, 2,224—Johnson							
Paintsville Clinic Hospital	Gen	Indiv	30	8	5	157	661
Paintsville Hospital	Gen	Corp	65	36	12	500	3,037
Paris, 6,067—Bourbon							
Massie Memorial Hospital▲	Gen	City	50	26	5	280	1,184
Pewee Valley, 625—Oldham							
Pewee Valley Sanitarium and Hospital	Gen	NPAssn	50	40	6	84	411
Pikeville, 4,185—Pike							
Methodist Hospital	Gen	Church	90	90	10	978	6,211
Pineville, 3,402—Bell							
Pineville Community Hosp.	Gen	Corp	70	60	11	321	2,956
Richmond, 7,335—Madison							
Gibson Hospital	Gen	Indiv	50	30	8	93	1,059
Irvine-McDowell Memorial Trachoma Hospital▲	Trac	State	38	20	..	...	135
Pattie A. Clay Infirmary	Gen	NPAssn	70	47	15	294	2,429
Riverside, 25—Warren							
Warren County Tuberculosis Hospital	TB	County	25	22	..	...	45
Russellville, 3,963—Logan							
Logan County Hospital	Gen	County	25	20	6	184	750
Shelbyville, 4,392—Shelby							
Kings Daughters Hospital	Gen	NPAssn	42	26	14	371	1,694
Somerset, 6,154—Pulaski							
Somerset City Hospital	Gen	City	60	41	21	679	2,533
Stanford, 1,940—Lincoln							
Stanford Hospital	Gen	Indiv	14	13	7	198	580
Versailles, 2,540—Woodford							
Woodford County Memorial Hospital	Gen	NPAssn	32	18	8	232	1,256

Key to symbols and abbreviations is on page 1386

KENTUCKY—Continued

Hospitals and Sanatoriums	Type of Service	Ownership or Control	Beds	Average Census †	Bassinets	Number of Births	Admissions †
Waverly Hills, 250—Jefferson							
Waverly Hills Sanatorium△△	TB	CyCo	600	357	..	....	322
Winchester, 8,504—Clark							
Clark County Hospital	Gen	NPAssn	50	37	9	261	1,211
Guerrant Memorial Hospital	Gen	NPAssn	25	14	4	44	401
Related Institutions							
Fleming, 1,193—Letcher							
Fleming Hospital	Gen	Part	30	14	4	106	695
Frankfort, 11,626—Franklin							
Kentucky Training Home	MeDe	State	705	705	..	....	114
La Grange, 1,334—Oldham							
State Reformatory Hospital	Inst	State	139	18	..	....	778
Lexington, 49,304—Lafayette							
Our Lady of the Oaks Hosp.°	N&M	Church	34	23	..	....	361
Louisville, 319,077—Jefferson							
Kings Daughters Home for Incurables	Incur	NPAssn	100	98	..	....	100
Susan Speed Davis Home and Hospital	Mat	Church	29	22	20	88	103

LOUISIANA

Hospitals and Sanatoriums	Type of Service	Ownership or Control	Beds	Average Census †	Bassinets	Number of Births	Admissions †
Abbeville, 6,672—Vermilion							
Abbeville Clinic Hospital	Gen	Indiv	21	6	4	102	776
Alexandria, 27,606—Rapides							
Baptist Hospital△	Gen	Church	172	116	28	1,058	7,858
Murrell Hospital-Clinic	Gen	Indiv	35	30	5	156	1,570
Texada Clinic-Hospital	Gen	Part	14	9	5	256	914
Veterans Admin. Hospital°△	Gen	Vet	662	599	..	....	3,716
Bastrop, 6,026—Morehouse							
Bastrop General Hospital	Gen	Church	28	24	8	262	1,442
Baton Rouge, 34,719—East Baton Rouge							
Baton Rouge General Hosp.°	Gen	NPAssn	57	56	24	868	3,533
Our Lady of the Lake Sanitarium△°	Gen	Church	200	191	58	2,330	13,265
Bogalusa, 14,604—Washington							
Elizabeth Sullivan Memorial Hospital△°	Gen	NPAssn	116	77	20	640	4,963
Breaux Bridge, 1,608—St. Martin							
St. Paul Hospital	Gen	Indiv	16	6	6	267	667
Bunkie, 3,575—Avoyelles							
Knoll Infirmary	Gen	Part	15	4	5	131	364
Carville, 250—Iberville							
U. S. Marine Hospital△	Lepr	USPHS	538	379	..	....	80
Converse, 314—Sabine							
Allen Sanitarium	Gen	Corp	15	10	6	160	850
Covington, 4,123—St. Tammany							
Penwick Sanitarium	N&M	Indiv	30	24	..	....	250
Crowley, 9,523—Acadia							
Acadia Hospital	Gen	Part	12	8	5	198	600
Legion Memorial Hospital	Gen	NPAssn	30	4	10	340	500
Delhi, 1,192—Richland							
Delhi Clinic and Sanitarium	Gen	Part	16	9	12	304	745
De Ridder, 3,750—Beauregard							
Frazar Clinic and Hospital	Gen	Indiv	25	15	12	550	730
Donaldsonville, 3,899—Ascension							
Donaldsonville General Hosp.	Gen	Indiv	12	2	6	77	253
Ferriday, 2,857—Concordia							
Ferriday Hospital	Gen	Part	26	10	8	178	930
Greenwell Springs, 130—East Baton Rouge							
Greenwell Springs Tuberculosis Hospital	TB	State	233	138	..	....	145
Haynesville, 2,418—Claiborne							
Haynesville Hospital△	Gen	Corp	25	12	8	126	912
Hodge, 1,445—Jackson							
Hodge Clinic-Hospital	Gen	NPAssn	18	2	3	73	475
Houma, 9,663—Terrebonne							
Ellender Memorial Hospital	Gen	Part	23	15	8	939	2,408
Independence, 1,496—Tangipahoa							
Florida Parishes Charity Hospital	Gen	State	60	48	14	633	2,604
Jackson, 5,384—East Feliciana							
East Louisiana State Hosp.	Ment	State	4,761	4,469	..	....	1,020
Parker Hospital△	Unit of East Louisiana State Hospital						
Lafayette, 19,218—Lafayette							
Des Ormeaux Clinic Hospital	Gen	Indiv	10	5	2	20	418
Lafayette Charity Hospital△	Gen	State	304	167	18	1,313	5,727
Lafayette Sanitarium	Gen	NPAssn	27	15	8	326	1,485
St. Ann Infirmary	Gen	Indiv	14	8	10	247	912
Lake Charles, 21,307—Calcasieu							
St. Patrick's Hospital△	Gen	Church	90	68	39	1,574	5,356
Lecompte, 1,311—Rapides							
Lecompte Sanitarium	Gen	Part	17	7	4	100	700
Mansfield, 4,065—De Soto							
Mansfield Sanitarium	Gen	Corp	32	11	4	98	988
Many, 1,474—Sabine							
Fraser Sanitarium	Gen	Indiv	17	8	8	258	782
Marksville, 1,811—Avoyelles							
Marksville Hospital	Gen	Indiv	17	8	4	208	694
Minden, 6,077—Webster							
Minden Sanitarium	Gen	Corp	45	38	12	544	2,564
Monroe, 28,350—Ouachita							
E. A. Conway Memorial Hospital△	Gen	State	160	152	16	865	7,494
G. B. Cooley Sanatorium	TB	NPAssn	75	47	..	....	22
Monroe Charity Hospital	See E. A. Conway Memorial Hospital						
Riverside Sanitarium△	Gen	Indiv	26	14	8	78	1,206

LOUISIANA—Continued

Hospitals and Sanatoriums	Type of Service	Ownership or Control	Beds	Average Census †	Bassinets	Number of Births	Admissions †
St. Francis Sanitarium△°	Gen	Church	145	143	25	1,161	8,435
Vaughan-Wright-Bendel Clinic-Hospital△	Gen	Part	36	36	10	184	1,784
New Iberia, 13,547—Iberia							
Dauterive Hospital	Gen	Part	26	14	6	364	1,549
Iberia General Hospital	Gen	Indiv	16	11	4	144	365
New Orleans, 494,537—Orleans							
Charity Hospital of Louisiana°△△	Gen	State	3,464	2,971	212	8,145	45,781
City Hospital for Mental Diseases	Ment	City	160	34	..	....	317
De Paul Sanitarium°△°	N&M	Church	293	215	..	....	879
Eye, Ear, Nose and Throat Hospital°△	ENT	NPAssn	85	62	..	....	3,855
Flint Goodridge Hospital of Dillard University°△°	Gen	NPAssn	97	70	20	503	2,402
French Hospital	Gen	NPAssn	62	39	12	307	2,087
Hotel Dieu, Sisters' Hospital°△°	Gen	Church	300	228	56	2,646	11,348
Illinois Central Hospital△	Indus	NPAssn	60	30	..	....	872
John Dibert Memorial Tuberculosis Hospital	Unit of Charity Hospital						
Lakeshore Hospital	Gen	NPAssn	175	91	25	631	4,758
Mercy Hospital-Soniat Memorial△°	Gen	Church	125	96	32	1,202	5,196
Metairie Hospital	Gen	NPAssn	22	....	8	Estab. 1947	
Ochsner Foundation Hosp.°△	Gen	NPAssn	202	....	..	Estab. 1947	
Richard Milliken Memorial Hospital	Unit of Charity Hospital						
Sara Mayo Hospital△	Gen	NPAssn	60	38	32	760	2,114
Southern Baptist Hosp.°△°	Gen	Church	275	223	70	2,854	12,196
Station Hospital	Gen	Army	100	40	..	....	1,472
Touro Infirmary°△°	Gen	NPAssn	383	340	41	2,111	13,070
U. S. Marine Hospital°△	Gen	USPHS	558	398	32	227	6,497
Veterans Admin. Hospital°△	Gen	Vet	600	567	..	....	4,084
Opelousas, 4,585—St. Landry							
St. Landry Clinic-Hospital	Gen	Corp	20	11	4	275	1,266
Pineville, 4,297—Rapides							
Central Louisiana State Hospital	Ment	State	2,500	2,432	..	....	715
Pogua Memorial Hospital△	Unit of Central Louisiana State Hospital						
Huey P. Long Charity Hosp.△	Gen	State	275	185	19	1,154	6,788
Plaquemine, 5,045—Iberville							
Plaquemine Sanitarium	Gen	NPAssn	35	26	9	340	2,220
Port Sulphur, 350—Plaquemines							
Port Sulphur Hospital	Gen	NPAssn	13	8	7	120	597
Ruston, 7,167—Lincoln							
Ruston-Lincoln Sanitarium	Gen	NPAssn	50	28	10	307	1,889
St. Martinsville, 3,501—St. Martin							
St. Martin Infirmary	Gen	Indiv	12	6	6	120	440
Shreveport, 98,167—Caddo							
Gillmer Clinic Hospital	TB	Indiv	32	24	..	....	123
Gowen Sanatorium	TB	Corp	40	35	..	....	141
Highland Sanitarium°△°	Gen	Part	102	80	16	403	4,164
North Louisiana Sanitarium°△°	Gen	Corp	130	84	17	457	5,062
Pines Sanatorium	TB	NPAssn	100	55	..	....	140
T. E. Schumpert Memorial Sanitarium°△°	Gen	Church	160	91	27	1,211	4,722
Shreveport Charity Hosp.°△°	State		650	455	52	2,502	13,666
Shriners Hospital for Crippled Children°△	Orth	NPAssn	60	35	..	....	102
Station Hospital△	Gen	Army	195	55	16	288	2,771
Tri-State Hospital△°	Gen	Corp	120	103	20	995	5,483
Thibodaux, 5,851—La Fourche							
St. Joseph Hospital	Gen	NPAssn	35	15	8	467	1,584
Winnsboro, 2,814—Franklin							
Winnsboro Sanitarium	Gen	Corp	20	9	4	122	678
Related Institutions							
Alexandria, 27,606—Rapides							
State Colony and Training School	MeDe	State	950	850	..	....	56
Angola, 18—West Feliciana							
Angola General Hospital	Inst	State	110	47	..	....	1,167
Morgan City, 6,561—St. Mary							
Morgan City General Hosp.	Gen	NPAssn	24	10	6	200	1,152
New Orleans, 494,537—Orleans							
Memorial Mercy Home-Hosp.	Mat	Church	61	58	15	101	114
New Orleans Convalescent Home	Conv	NPAssn	33	10	..	....	145
Pleasant Hill, 727—Sabine							
Prothro Clinic and Hospital	Gen	Indiv	14	9	5	109	709

MAINE

Hospitals and Sanatoriums	Type of Service	Ownership or Control	Beds	Average Census †	Bassinets	Number of Births	Admissions †
Augusta, 19,360—Kennebec							
Augusta General Hospital△°	Gen	NPAssn	75	57	20	675	2,574
Augusta State Hospital	Ment	State	1,600	1,528	..	....	368
Bangor, 29,822—Penobscot							
Bangor Sanatorium	TB	NPAssn	30	19	..	....	50
Bangor State Hospital°	Ment	State	1,222	1,175	..	....	423
Eastern Maine General Hospital°△°	Gen	NPAssn	213	219	30	1,262	7,350
St. Joseph Hospital	Gen	Church	50	....	..	Estab. 1947	
Stinson Private Hospital	Gen	Indiv	23	17	12	282	800

Key to symbols and abbreviations is on page 1396

MAINE—Continued

Hospitals and Sanatoriums	Type of Service	Ownership or Control	Beds	Average Census †	Bassinets	Number of Births	Admissions †
Bar Harbor, 4,378—Hancock							
Mount Desert Island Hosp.▲	Gen	NPAssn	58	27	10	244	1,069
Bath, 10,235—Sagadahoc							
Bath Memorial Hospital◆▲	Gen	NPAssn	70	58	30	371	1,528
Belfast, 5,340—Waldo							
Bradbury Memorial Hospital	Gen	NPAssn	18	7	..	....	166
Waldo County General Hosp.▲	Gen	NPAssn	45	34	10	223	920
Biddeford, 19,790—York							
Trull Hospital◆	Gen	Corp	48	38	10	281	1,190
Webber Hospital◆	Gen	NPAssn	55	37	15	331	2,001
Blue Hill, 1,343—Hancock							
Blue Hill Memorial Hospital	Gen	NPAssn	25	7	6	41	267
Boothbay Harbor, 2,121—Lincoln							
St. Andrews Hospital▲	Gen	Corp	25	15	4	99	520
Brunswick, 8,626—Cumberland							
Brunswick Hospital	Gen	Indiv	45	26	10	271	965
Dr. Wilson's Private Hospital	Gen	Indiv	17	10	6	120	1,229
Camden, 3,554—Knox							
Camden Community Hospital	Gen	NPAssn	18	10	6	117	530
Caribou, 8,218—Aroostook							
Cary Memorial Hospital▲	Gen	City	60	28	11	386	1,322
Castine, 662—Hancock							
Castine Community Hospital	Gen	NPAssn	12	10	6	152	492
Damariscotta, 844—Lincoln							
Miles Memorial Hospital	Gen	NPAssn	28	18	9	264	936
Dexter, 3,714—Penobscot							
Plummer Memorial Hospital	Gen	NPAssn	20	10	7	185	515
Dover-Foxcroft, 4,015—Piscataquis							
Mayo Memorial Hospital	Gen	City	21	15	8	204	712
Ellsworth, 3,911—Hancock							
Eastern Memorial Hospital	Gen	NPAssn	15	8	8	197	1,348
Fairfield, 5,594—Somerset							
Central Maine Sanatorium▲	TB	State	200	148	..	....	302
Farmington, 3,743—Franklin							
Franklin County Memorial Hospital▲	Gen	NPAssn	40	20	14	380	1,002
Fort Fairfield, 3,667—Aroostook							
Fort Fairfield Clinic Hosp.	Gen	Corp	22	14	10	241	676
Gardiner, 6,044—Kennebec							
Gardiner General Hospital▲	Gen	NPAssn	54	32	16	382	1,530
Greenville Junction, 600—Piscataquis							
Charles A. Dean Memorial Hospital	Gen	NPAssn	25	8	4	110	510
Greenwood Mountain, 250—Oxford							
Western Maine Sanatorium◆▲	TB	State	150	95	..	....	151
Hartland, 1,350—Somerset							
Scott-Webb Memorial Hosp.	Gen	NPAssn	24	21	10	172	760
Houlton, 7,771—Aroostook							
Aroostook General Hospital	Gen	NPAssn	35	26	10	194	1,119
Madigan Memorial Hospital◇	Gen	Church	53	41	15	224	1,085
Island Falls, 1,276—Aroostook							
Emma V. Milliken Memorial Hospital	Gen	NPAssn	25	12	7	153	602
Lewiston, 59,286—Androscoggin							
Central Maine General Hospital◆▲◇	Gen	NPAssn	220	190	58	1,765	5,721
St. Mary's General Hosp.◆▲◇	Gen	Church	155	131	25	1,042	4,154
Old Town, 7,886—Penobscot							
Home Private Hospital	Gen	Indiv	15	8	8	230	400
Portland, 73,643—Cumberland							
Children's Hospital▲	Chil	NPAssn	90	58	..	....	380
Maine Eye and Ear Infirmary◇	Gen	NPAssn	125	93	30	792	4,678
Maine General Hospital◆▲◇	Gen	NPAssn	330	286	55	1,960	8,400
Mercy Hospital◇	Gen	Church	156	135	30	1,369	4,767
Portland City Hospital	Gen	City	175	87	15	21	651
U. S. Marine Hospital▲	Gen	USPHS	90	62	..	....	1,529
Presque Isle, 7,629—Aroostook							
Northern Maine Sanatorium	TB	State	124	80	..	....	99
Presque Isle General Hosp.◇	Gen	NPAssn	50	35	10	374	1,722
Rockland, 8,609—Knox							
Knox County General Hosp.▲	Gen	NPAssn	65	32	12	356	1,342
Rumford, 10,230—Oxford							
Rumford Community Hosp.◇	Gen	NPAssn	65	46	12	589	2,392
Sanford, 14,886—York							
Henrietta D. Goodall Hosp.▲	Gen	NPAssn	46	45	14	457	2,432
Skowhegan, 7,159—Somerset							
Redington Memorial Hospital	Gen	NPAssn	26	24	8	344	1,000
Togus, 2,350—Kennebec							
Veterans Admin. Center▲	Gen	Vet	924	735	..	....	3,081
Waterville, 16,688—Kennebec							
Sisters' Hospital▲◇	Gen	Church	102	75	18	806	3,855
Thayer Hospital▲	Gen	NPAssn	35	21	8	185	1,538
Westbrook, 11,087—Cumberland							
Westbrook Hospital	Gen	Corp	25	18	10	247	866

Related Institutions

Bangor, 29,822—Penobscot							
Gay Private Hospital	N&M	Indiv	18	18	..	....	140
Eagle Lake, 1,861—Aroostook							
Northern Maine General Hosp.	Gen	Church	40	30	7	125	1,064
Fewnal, 575—Cumberland							
Pownal State School	MeDv	State	1,150	1,074	2	9	210
Union, 1,150—Knox							
Jones Sanitarium	N&M	Corp	30	15	..	....	6
Van Buren, 5,386—Aroostook							
Hotel Dieu Hospital	Gen	Church	15	9	6	178	512
Yarmouth, 2,214—Cumberland							
Gilbert Maternity Home	Mat	Indiv	16	12	6	22	22
York Village, 1,506—York							
York Hospital	Gen	NPAssn	22	11	6	137	655

MARYLAND

Hospitals and Sanatoriums	Type of Service	Ownership or Control	Beds	Average Census †	Bassinets	Number of Births	Admissions †
Aberdeen Proving Ground,—Harford							
Station Hospital	Gen	Army	150	134	14	99	2,714
Annapolis, 13,069—Anne Arundel							
Annapolis Emergency Hosp.◇	Gen	NPAssn	70	32	15	307	2,584
U. S. Naval Hospital◆▲	Gen	Navy	200	111	20	378	2,482
Army Chemical Center,—Harford							
Station Hospital	Gen	Army	30	11	..	....	394
Baltimore, 859,100—Baltimore City							
Baltimore City Hospitals◆▲◇	Gen-Tb	City	2,606	1,538	80	1,784	7,689
Baltimore City Tuberculosis Hospital	Unit of Baltimore City Hospitals						
Baltimore Eye, Ear and Throat Charity Hospital◆▲	ENT	NPAssn	60	54	6	....	4,011
Beck Diagnostic Clinic-Hosp.	Gen	Indiv	14	11	..	....	243
Bon Secours Hospital◆▲◇	Gen	Church	145	135	35	1,317	4,705
Children's Hospital School◆▲	Orth	NPAssn	130	100	..	....	493
Church Home and Hosp.◆▲◇	Gen	Church	165	129	28	1,176	5,177
Franklin Square Hosp.◆▲◇	Gen	NPAssn	218	138	56	1,917	5,927
Gundry Sanitarium	N&M	Indiv	45	37	..	....	30
Hospital for Women◆▲◇	Gen	NPAssn	174	129	38	1,437	4,119
James Lawrence Kernan Hospital and Industrial School for Crippled Children◆▲	Orth	NPAssn	85	66	..	....	242
Johns Hopkins Hospital◆▲◇	Gen	NPAssn	900	777	75	2,855	19,857
Johnston Memorial Children's Hospital	Unit of Union Memorial Hospital						
Maryland General Hosp.◆▲◇	Gen	Church	242	205	26	1,109	6,075
Mercy Hospital◆▲◇	Gen	Church	260	242	50	1,877	9,911
Phipps Psychiatric Clinic	Unit of Johns Hopkins Hospital						
Presbyterian Eye, Ear and Throat Charity Hospital	ENT	Church	60	2	..	..	1,141
Provident Hospital and Free Dispensary◆▲◇	Gen	NPAssn	125	93	30	1,086	2,737
St. Agnes' Hospital◆▲◇	Gen	Church	221	175	58	1,765	6,717
St. Joseph's Hospital◆▲◇	Gen	Church	250	190	37	1,372	7,184
Seton Institute◇	N&M	Church	412	371	..	....	276
Sinai Hospital◆▲◇	Gen	NPAssn	310	238	58	2,004	9,227
South Baltimore General Hospital◆▲◇	Gen	NPAssn	157	119	24	1,219	6,122
Sydenham Hospital◆▲◇	Iso	City	110	43	6	2	1,103
Union Memorial Hosp.◆▲◇	Gen	NPAssn	341	304	36	1,129	9,109
U. S. Marine Hospital◆▲	Gen	USPHS	300	205	..	....	7,962
University Hospital◆▲◇	Gen	State	435	403	70	2,486	10,618
West Baltimore General Hospital◆▲◇	Gen	NPAssn	187	140	35	1,001	6,378
Bethesda, 30,026—Montgomery							
Suburban Hospital◆▲◇	Gen	NPAssn	102	74	22	875	3,577
U. S. Naval Hospital◆▲	Gen	Navy	1,400	1,200	40	1,050	14,258
Cambridge, 10,102—Dorchester							
Cambridge Maryland Hosp.▲◇	Gen	NPAssn	75	40	15	453	2,124
Eastern Shore State Hospital	Ment	State	500	471	..	....	395
Catonsville, 7,647—Baltimore							
Haarlem Lodge	N&M	Indiv	50	42	..	....	174
Spring Grove State Hosp.◆	Ment	State	2,277	2,202	..	....	385
Chestertown, 2,760—Kent							
Kent and Upper Queen Anne's General Hospital	Gen	NPAssn	50	30	12	253	889
Cheverly (Hyattsville P.O.), 9.6—Prince Georges							
Prince George's General Hosp.	Gen	County	102	76	18	787	3,959
Crisfield, 3,948—Somerset							
Edward W. McCready Memorial Hospital	Gen	NPAssn	38	24	14	187	782
Crownsville, 20—Anne Arundel							
Crownsville State Hospital	Ment	State	1,630	1,675	..	....	603
Hospital for Colored Feebleminded Children	Unit of Crownsville State Hospital						
Cumberland, 39,483—Allegany							
Allegany Hospital of the Sisters of Charity◆◇	Gen	Church	127	108	30	960	5,445
Memorial Hospital◆◇	Gen	CyCo	218	186	50	1,250	6,750
Easton, 4,578—Talbot							
Memorial Hospital◆◇	Gen	NPAssn	125	73	19	557	5,162
Elkton, 3,518—Cecil							
Union Hosp. of Cecil County	Gen	NPAssn	73	48	25	476	1,565
Fort George G. Meade,—Anne Arundel							
Station Hospital▲	Gen	Army	1,055	410	10	341	6,261
Fort Howard,—Baltimore							
Veterans Admin. Hospital◆▲	Gen	Vet	443	392	..	....	4,050
Frederick, 15,852—Frederick							
Emergency Hospital	Gen	County	38	32	16	302	1,695
Frederick Memorial Hosp.◇	Gen	NPAssn	125	96	24	1,006	4,690
Frostburg, 7,659—Allegany							
Miners Hospital	Gen	State	51	38	14	460	1,403
Glenn Dale, 305—Prince Georges							
Tuberculosis Sanatorium	See Washington, D. C.						
Hagerstown, 32,491—Washington							
Washington County Hosp.◆▲◇	Gen	NPAssn	158	150	48	1,626	6,467
Havre de Grace, 4,967—Harford							
Harford Memorial Hospital▲	Gen	NPAssn	86	62	30	868	3,470
Henryton, 50—Carroll							
Maryland Tuberculosis Sanat.	TB	State	438	310	..	....	367
Ijamsville, 300—Frederick							
Biggs Cottage Sanitarium	N&M	Indiv	26	19	..	....	37
La Plata, 488—Charles							
Physicians Memorial Hospital	Gen	NPAssn	22	16	16	216	748
Laurel, 2,825—Prince Georges							
District Training School	See Washington, D. C.						
Laurel Sanitarium	N&M	Indiv	75	75	..	....	450
Warren Hospital	Gen	Part	16	10	6	165	463
Leonardtown, 600—St. Marys							
St. Mary's Hospital	Gen	NPAssn	45	25	11	303	1,210

Key to symbols and abbreviations is on page 1398

MARYLAND—Continued

Hospitals and Sanatoriums	Type of Service	Ownership or Control	Beds	Average Census †	Bassinets	Number of Births	Admissions †
Mount Wilson, 225—Baltimore							
Mount Wilson Branch, Maryland Tuberculosis Sanat.	TB	State	200	176	..	...	174
Olney, 100—Montgomery							
Montgomery County General Hospital	Gen	NPAssn	40	32	14	383	1,527
Patuxent River,—St. Marys							
U. S. Naval Air Station Dispensary	Gen	Navy	248	46	14	322	2,405
Perry Point, 90—Cecil							
Veterans Admin. Hospital◆▲	Ment	Vet	1,830	1,635	..	...	1,140
Prince Frederick, 300—Calvert							
Calvert County Hospital	Gen	Corp	26	10	9	247	753
Reisterstown, 2,000—Baltimore							
Mount Pleasant	TB	NPAssn	60	50	..	..	56
Relay, 2,016—Baltimore							
Relay Sanitarium	N&M	Part	35	29	..	...	252
Riverdale, 2,350—Prince Georges							
Eugene Leland Memorial Hospital	Gen	Corp	58	45	21	480	1,852
Rockville, 2,047—Montgomery							
Chestnut Lodge Sanitarium◆▲	N&M	Indiv	60	49	..	...	35
Salisbury, 15,315—Wicomico							
Maryland Tuberculosis Sanatorium, Eastern Shore Branch	TB	State	60	51	..	...	72
Peninsula General Hosp.◆▲	Gen	NPAssn	177	174	51	1,285	4,479
Silver Spring, 28,000—Montgomery							
Cedarcroft Sanitarium	N&M	Part	50	30	..	...	769
State Sanatorium, 200—Frederick							
Maryland Tuberculosis Sanat.	TB	State	523	384	..	..	401
Sykesville, 886—Carroll							
Springfield State Hospital◆	Ment	State	3,000	2,933	..	...	650
Takoma Park, 8,958—Montgomery							
Walter Reed General Hospital	See Washington, D. C.						
Washington Sanitarium and Hospital	See Washington, D. C.						
Towson, 2,074—Baltimore							
Aigburth Manor Hospital	Nerv	Indiv	25	23	..	...	53
Hospital for Consumptives (Endowood Sanatorium)	TB	NPAssn	180	164	..	...	174
Sheppard and Enoch Pratt Hospital◆▲	N&M	NPAssn	285	198	..	...	191
Western Port, 3,565—Allegany							
Reeves Clinic Hospital	Gen	Part	10	4	1	6	230

Related Institutions

Baltimore, 859,100—Baltimore City							
Baltimore City Jail Hospital	Inst	City	24	2	..	...	465
Happy Hills Convalescent Home for Children	Conv	NPAssn	80	57	..	...	191
Home for Incurables	Incur	NPAssn	157	130	..	...	22
Levindale Hebrew Home and Infirmary	Inst	NPAssn	175	170	..	...	65
Maryland Penitentiary Hosp.	Inst	State	50	21	..	...	262
Ellicott City, 1,216—Howard							
Pinel Clinic Hospital	N&M	Corp	36	30	..	...	177
Jessups, 400—Anne Arundel							
Maryland House of Correction Hospital	Inst	State	25	6	..	...	301
Owings Mills, 150—Baltimore							
Rosewood State Training School	MeDe	State	1,229	1,249	..	...	77
Rockville, 2,047—Montgomery							
Christ Child Farm for Convalescent Children	Conv	NPAssn	31	27	..	...	86

MASSACHUSETTS

Hospitals and Sanatoriums

Acushnet (New Bedford P.O.),—Bristol							
Acushnet Hospital	Gen	NPAssn	52	39	17	924	1,561
Adams, 12,698—Berkshire							
W. B. Plunkett Memorial Hospital◆	Gen	City	50	29	15	340	1,191
Amesbury, 10,852—Essex							
Amesbury Hospital◆	Gen	City	35	22	10	339	2,415
Arlington, 40,013—Middlesex							
Ring Sanatorium and Hosp.	N&M	Corp	60	46	..	...	418
Symmes Arlington Hospital◆	Gen	NPAssn	68	51	19	348	2,082
Attleboro, 22,071—Bristol							
Bristol County Tuberculosis Hospital	TB	County	60	55	..	...	128
Sturdy Memorial Hospital◆	Gen	NPAssn	118	89	32	1,162	3,943
Ayer, 3,572—Middlesex							
Community Memorial Hosp.▲	Gen	NPAssn	27	16	10	360	810
Baldwinsville, 2,200—Worcester							
Hospital Cottages for Children	Chil	NPAssn	115	53	15	...	477
Bedford, 3,867—Middlesex							
Veterans Admin. Hospital◆▲	Ment	Vet	1,875	1,809	..	...	534
Beverly, 25,537—Essex							
Beverly Hospital◆◆◇	Gen	NPAssn	166	150	41	1,000	5,312
Boston, 770,816—Suffolk							
Adams House (Adams Nervine Hospital)	Nerv	NPAssn	35	30	..	...	78
Audubon Hospital	Gen	Corp	37	30	6	125	1,106
Beth Israel Hospital◆◆◇	Gen	NPAssn	215	190	..	...	5,917
Boston City Hospital◆◆◇	Gen	City	2,378	1,717	159	2,614	56,794
Boston Floating Hospital◆◆	Chil	NPAssn	56	46	..	...	1,577
Boston Lying-In Hosp.◆◆	Mat	NPAssn	138	83	125	2,622	3,425

MASSACHUSETTS—Continued

Hospitals and Sanatoriums	Type of Service	Ownership or Control	Beds	Average Census †	Bassinets	Number of Births	Admissions †
Boston Psychopathic Hospital◆◇	Ment	State	117	115		..	1,251
Boston Sanatorium◆	TB	City	573	419	..	...	572
Boston State Hospital◆◆◇	Ment	State	3,047	2,858	..	...	1,220
Carney Hospital◆◆◇	Gen	Church	228	203	34	1,254	6,164
Channing Home	TB	NPAssn	28	26	..	...	43
Children's Hospital◆◆◇	Chil	NPAssn	345	251	..	...	8,329
Doctors Hospital	Gen	Corp	27	14	10	212	845
Faulkner Hospital◆◆◇	Gen	NPAssn	136	102	25	792	3,579
Glenside Hospital	N&M	Corp	118	115	..		199
Harley Hospital	Gen	Corp	55	38	20	469	1,840
Haynes Memorial Hospital	Unit of Massachusetts Memorial Hospitals						
House of the Good Samaritan◆◇	Card	NPAssn	79	45	..	..	130
Huntington Clinic	Maintained by Massachusetts Gen. Hosp.						
Infants Hospital	Unit of Children's Hospital						
Jewish Memorial Hospital	GenChr	NPAssn	86	86	..	..	114
Joseph H. Pratt Diagnostic Hospital◆▲	Gen	NPAssn	83	42	..	...	2,700
Long Island Hospital◆	GenChr	City	516	434	..	...	678
Massachusetts Eye and Ear Infirmary◆▲	ENT	NPAssn	201	137	..	..	6,372
Massachusetts General Hospital◆◆◇	Gen	NPAssn	449	342	..	...	7,504
Massachusetts General Hospital, Baker Memorial▲	Gen	NPAssn	303	251	42	882	6,650
Massachusetts General Hospital, Phillips House◆	Gen	NPAssn	94	85	22	356	2,310
Massachusetts Memorial Hospitals◆◆◇	Gen	NPAssn	484	281	45	951	7,449
Massachusetts Women's Hospital◆	Gen	NPAssn	60	41	22	637	1,810
New England Baptist Hosp.◆◇	Gen	NPAssn	227	209	..	...	5,201
New England Deaconess Hospital◆◆◇	Gen	Church	300	270	..	...	6,858
New England Hospital for Women and Children◆◆◇	Gen	NPAssn	185	124	75	2,375	5,057
Palmer Memorial Hospital◆	Unit of New England Deaconess Hospital						
Peter Bent Brigham Hospital◆◆◇	Gen	NPAssn	250	203	..	...	4,987
Robert Breck Brigham Hosp.◆	Gen	NPAssn	103	67	..	...	786
Robert Dawson Evans Memorial◆	Unit of Massachusetts Memorial Hosps.						
St. Elizabeth's Hospital◆◆◇	Gen	Church	258	215	64	1,902	6,900
St. Margaret's Hospital◆◇	Gen	Church	125	128	75	2,000	4,400
St. Mary's Lying-In Hosp.▲	MatChil	Church	51	56	21	170	350
U. S. Marine Hospital◆◆▲	Gen	USPHS	361	300	..	...	4,000
Veterans Admin. Hospital◆◆	Gen	Vet	382	337	..	...	5,233
Wolfson Nose and Throat Hospital	ENT	Indiv	9	4	..	...	450
Bridgewater, 6,902—Plymouth							
Bridgewater State Hospital	See State Farm, Mass.						
Brockton, 62,343—Plymouth							
Brockton Hospital◆▲	Gen	NPAssn	128	92	23	714	3,254
Goddard Hospital◆	Gen	Corp	67	60	25	847	2,030
Moore Hospital	Gen	Indiv	22	16	8	267	626
Brookline, 49,786—Norfolk							
Allerton Hospital	Gen	NPAssn	60	55	20	721	2,572
Bellevue Hospital◆	Gen	NPAssn	33	24	10	204	...
Board of Health Hospital◆	Tblso	City	55	14	..	...	16
Bournewood Hospital	N&M	Indiv	69	53	..	...	611
Brooks Hospital◆	Gen	NPAssn	50	38	.	...	1,324
Evangeline Booth Maternity Hospital and Home◆▲	Mat	Church	67	78	48	850	1,225
Free Hospital for Women◆▲	Gen	NPAssn	80	69	..	...	2,986
Parkway Hospital	Unit of Free Hospital for Women						
Cambridge, 130,879—Middlesex							
Cambridge City Hospital◆◆◇	Gen	City	300	181	100	1,706	6,110
Cambridge Sanatorium	TB	City	100	91	..	...	201
Charlesgate Hospital	Gen	Corp	85	64	10	407	3,379
Chester Hospital	Gen	Corp	35	27	12	284	1,623
Mount Auburn Hospital◆◆◇	Gen	NPAssn	221	200	51	1,653	6,873
Canton, 6,381—Norfolk							
Massachusetts Hospital School	Orth	State	260	129	..	..	56
Chelsea, 41,259—Suffolk							
Captain John Adams Hosp.▲	Gen	State	208	200	..	..	2,983
Chelsea Memorial Hospital◆	Gen	NPAssn	98	75	25	665	2,982
U. S. Naval Hospital◆◆▲	Gen	Navy	1,000	667	20	693	9,633
Chicopee Falls, 16,941—Hampden							
Station Hospital▲	Gen	Army	125	45	.	...	1,200
Clinton, 12,440—Worcester							
Clinton Hospital◆	Gen	NPAssn	63	59	20	378	1,900
Concord, 7,972—Middlesex							
Emerson Hospital◆	Gen	NPAssn	37	30	18	402	1,426
Danvers, 14,179—Essex							
Danvers State Hospital	See Hathorne						
Hunt Memorial Hospital	Gen	City	16	9	8	95	621
Everett, 46,784—Middlesex							
Whidden Memorial Hosp.◆◇	Gen	NPAssn	95	97	20	1,136	3,553
Fall River, 115,428—Bristol							
Fall River General Hospital	GenTb	City	269	148	..	...	1,378
St. Anne's Hospital◆◆◇	Gen	Church	165	91	32	1,244	5,694
Truesdale Hospital◆◆◇	Gen	NPAssn	108	102	32	1,023	5,808
Union Hospital◆◆◇	Gen	NPAssn	165	144	42	1,447	5,946
Fitchburg, 41,824—Worcester							
Burbank Hospital◆◇	Gen	City	249	192	37	1,061	5,556
Lucy Helen Memorial Hosp.	Unit of Burbank Hospital						
Foxboro, 6,305—Norfolk							
Foxboro State Hospital◆▲	Ment	State	1,232	1,241	..	..	382
Framingham, 23,214—Middlesex							
Framingham Union Hosp.◆◇	Gen	NPAssn	104	80	30	698	3,961
Veterans Admin. Hospital◆▲	Gen	Vet	1,000	600	..	...	1,000

Key to symbols and abbreviations is on page 1396

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MASSACHUSETTS—Continued

Hospitals and Sanatoriums	Type of Service	Ownership or Control	Beds	Average Census	Bassinets	Number of Births	Admissions †
Gardner, 20,228—Worcester							
Gardner State Hospital♦▲●	Ment	State	1,442	1,349	..	...	213
Henry Heywood Memorial Hospital▲●	Gen	NPAssn	114	92	20	669	3,221
Georgetown, 1,868—Essex							
Baldpate	N&M	Corp	42	36	..	...	202
Gloucester, 24,065—Essex							
Addison Gilbert Hospital▲●	Gen	NPAssn	85	73	15	644	2,687
Great Barrington, 5,084—Berkshire							
Fairview Hospital▲	Gen	NPAssn	56	36	14	227	1,207
Greenfield, 15,672—Franklin							
Franklin County Public Hospital▲●	Gen	NPAssn	102	91	25	864	3,335
Hanson, 2,576—Plymouth							
Plymouth County Hospital▲	TB	County	160	52	..	...	56
Hathorne, 166—Essex							
Danvers State Hospital♦▲●	Ment	State	2,383	2,294	..	...	750
Haverhill, 46,752—Essex							
Benson Hospital	Gen	Corp	32	18	17	153	1,099
Haverhill Municipal Hospital (Hale)▲	Gen	City	161	107	30	1,024	8,902
Haydenville, 1,502—Hampshire							
Hampshire County Sanatorium	See Northampton						
Holden, 3,804—Worcester							
Holden District Hospital▲	Gen	NPAssn	22	No data supplied			
Holyoke, 56,735—Hampden							
Holyoke Hospital▲●	Gen	NPAssn	140	123	24	784	3,611
Providence Hospital♦▲●	Gen	Church	168	152	32	1,362	4,617
Hyannis, 1,808—Barnstable							
Cape Cod Hospital▲	Gen	NPAssn	65	67	15	638	2,280
Ipswich, 6,945—Essex							
Benjamin Stickney Cable Memorial Hospital▲	Gen	NPAssn	26	15	10	193	693
Lawrence, 84,323—Essex							
Beede Burke Memorial Hosp.	Gen	City	92	60	5	52	3,278
Clover Hill Hospital	Gen	Corp	35	43	24	801	2,246
Lawrence General Hosp.♦▲●	Gen	NPAssn	191	166	42	1,736	8,480
Leominster, 22,726—Worcester							
Leominster Hospital▲●	Gen	NPAssn	100	67	22	663	3,008
Lowell, 101,389—Middlesex							
Lowell General Hospital♦▲●	Gen	NPAssn	183	143	30	1,058	4,964
St. John's Hospital♦▲●	Gen	Church	180	175	35	957	5,539
St. Joseph's Hospital♦▲●	Gen	Church	140	112	30	1,175	4,734
Shaw Hospital	Gen	Indiv	20	10	14	216	357
Ludlow, 5,181—Hampden							
Ludlow Hospital	Gen	NPAssn	35	24	16	482	1,079
Lynn, 98,125—Essex							
Lynn Hospital▲●	Gen	NPAssn	242	194	74	2,128	8,110
Union Hospital	Gen	NPAssn	55	39	22	653	2,053
Malden, 58,010—Middlesex							
Malden Hospital♦▲●	Gen	NPAssn	220	153	40	1,301	6,327
Marblehead, 10,684—Essex							
Mary A. Alley Emergency Hospital	Gen	City	18	11	10	93	482
Marlboro, 15,154—Middlesex							
Marlborough Hospital▲	Gen	NPAssn	63	50	20	477	1,965
Medfield, 4,894—Norfolk							
Medfield State Hospital♦▲	Ment	State	1,541	1,665	..	...	335
Medford, 63,063—Middlesex							
Lawrence Memorial Hosp.▲●	Gen	NPAssn	76	64	34	1,083	3,021
Melrose, 25,233—Middlesex							
Melrose Hospital▲●	Gen	NPAssn	125	91	24	546	3,010
New England Sanitarium and Hospital▲●	Gen	Church	145	133	19	569	3,363
Methuen, 21,886—Essex							
Mary P. K. McGowan Memorial Hospital	Gen	Corp	28	20	9	428	1,079
Middleboro, 9,032—Plymouth							
Lakeville State Sanatorium▲	TB	State	304	143	..	...	157
St. Luke's Hospital▲	Gen	NPAssn	32	25	15	314	1,012
Middleton, 2,543—Essex							
Essex County Tuberculosis Hospital▲	TB	County	360	216	..	...	207
Milford, 15,308—Worcester							
Milford Hospital▲●	Gen	Corp	61	48	15	704	2,500
Milton, 18,768—Norfolk							
Milton Hospital and Convalescent Home▲	Gen	NPAssn	23	11	6	73	498
Montague City, 635—Franklin							
Farren Memorial Hospital▲	Gen	Church	74	57	12	285	2,592
Nantucket, 3,691—Nantucket							
Nantucket Cottage Hospital	Gen	NPAssn	27	18	5	67	572
Natick, 13,851—Middlesex							
Leonard Morse Hospital▲	Gen	NPAssn	56	42	17	483	1,937
Needham, 12,445—Norfolk							
Glover Memorial Hospital	Gen	City	24	19	10	216	812
New Bedford, 110,341—Bristol							
St. Luke's Hospital▲●	Gen	NPAssn	294	198	45	2,282	7,635
Sassaquin Sanatorium▲	TB	NPAssn	124	99	..	...	133
Union Hospital	Gen	Corp	38	34	..	...	1,300
Newburyport, 13,916—Essex							
Anna Jaques Hospital▲	Gen	NPAssn	53	42	19	342	1,717
Worcester Memorial Hosp.▲	Gen	NPAssn	20	14	5	136	530
Newton, 69,373—Middlesex							
New England Peabody Home for Crippled Children▲	Orth	NPAssn	100	61	..	...	11
Newton-Wellesley Hosp.♦▲●	Gen	NPAssn	240	192	85	1,617	6,632
Norfolk, 2,294—Norfolk							
State Prison Colony Hosp.▲	Inst	State	75	57	..	...	680
North Adams, 22,215—Berkshire							
North Adams Hospital▲	Gen	NPAssn	91	49	19	549	2,046
Northampton, 24,704—Hampshire							
Cooley Dickinson Hospital♦▲●	Gen	NPAssn	151	133	35	1,309	5,357
Hampshire County Sanatorium	TB	County	60	47	..	...	69

MASSACHUSETTS—Continued

Hospitals and Sanatoriums	Type of Service	Ownership or Control	Beds	Average Census	Bassinets	Number of Births	Admissions †
Northampton State Hosp.♦▲●	Ment	State	1,788	2,163	..	...	765
Veterans Admin. Hospital▲	Ment	Vet	1,005	1,077	..	...	545
North Grafton, 1,150—Worcester							
Grafton State Hospital♦▲	Ment	State	1,863	1,804	..	...	335
North Reading, 472—Middlesex							
North Reading State Sanat.▲	TB	State	240	109	..	...	67
Norwood, 15,383—Norfolk							
Norwood Hospital▲	Gen	NPAssn	122	96	30	910	3,904
Oak Bluffs, 1,584—Dukes							
Martha's Vineyard Hospital▲	Gen	NPAssn	35	22	10	118	639
Palmer, 9,149—Hampden							
Monson State Hospital♦▲	Epil	State	1,643	1,402	..	...	111
Wing Memorial Hospital▲	Gen	NPAssn	29	27	12	184	1,007
Peabody, 21,711—Essex							
Josiah B. Thomas Hospital	Gen	City	65	46	15	415	1,974
Pittsfield, 49,884—Berkshire							
Hillcrest Hospital	Gen	NPAssn	42	29	10	274	1,090
House of Mercy Hospital▲●	Gen	NPAssn	180	144	31	588	4,632
St. Luke's Hospital▲●	Gen	Church	156	126	38	1,080	4,406
Plymouth, 13,100—Plymouth							
Jordan Hospital▲	Gen	NPAssn	60	35	15	348	1,701
Pocasset, 305—Barnstable							
Barnstable County Sanat.	Tblso	County	70	55	..	...	207
Quincy, 75,810—Norfolk							
Quincy City Hospital♦▲●	Gen	City	324	214	60	1,767	8,149
Rutland, 2,181—Worcester							
Jewish Tuberculosis Sanat.	TB	NPAssn	30	28	..	...	43
Rutland State Sanatorium▲	TB	State	300	223	..	...	192
Rutland Heights, 800—Worcester							
Veterans Admin. Hospital▲	TB	Vet	491	470	..	...	388
Salem, 41,213—Essex							
North Shore Babies' Hosp.▲	Chil	NPAssn	35	29	13	...	592
Salem Hospital♦▲●	Gen	NPAssn	225	190	29	1,391	6,977
Somerville, 102,177—Middlesex							
Somerville Hospital▲	Gen	NPAssn	120	93	30	1,160	5,318
South Braintree,—Norfolk							
Norfolk County Hospital▲	TB	County	154	116	..	...	73
Southbridge, 16,825—Worcester							
Harrington Memorial Hosp.▲	Gen	NPAssn	40	30	18	559	1,433
South Dartmouth, 1,813—Bristol							
Sol-e-Mar Orthopedic Hospital for Children	Orth	NPAssn	40	25	..	...	16
Springfield, 149,554—Hampden							
Health Department Hosp.▲	Tblso	City	100	48	..	...	425
Mercy Hospital♦▲●	Gen	Church	340	322	60	1,796	11,049
Shriners Hospital for Crippled Children♦▲●	Orth	NPAssn	60	51	..	...	271
Springfield Hospital♦▲●	Gen	NPAssn	281	249	4	14	7,490
Wesson Maternity Hospital▲	Mat	NPAssn	70	60	76	2,965	3,202
Wesson Memorial Hospital▲	Gen	NPAssn	112	81	..	...	3,459
State Farm, 200—Plymouth							
Bridgewater State Hospital	Ment	State	975	986	..	...	116
Stockbridge, 1,915—Berkshire							
Austen Riggs Foundation▲	Ment	NPAssn	50	19	..	...	147
Taunton, 37,395—Bristol							
Morton Hospital▲●	Gen	NPAssn	100	65	45	903	3,218
Taunton State Hospital♦▲	Ment	State	1,961	1,918	..	...	647
Tewksbury, 6,361—Middlesex							
Tewksbury State Hospital and Infirmary♦▲	GenChr	State	3,425	1,864	40	90	1,335
Vineyard Haven, 1,500—Dukes							
U. S. Marine Hospital	Gen	USPHS	30	20	..	...	333
Walpole, 7,443—Norfolk							
Pondville Hospital▲	Cancer	State	50	40	..	...	777
Waltham, 40,029—Middlesex							
Metropolitan State Hosp.♦▲	Ment	State	1,580	1,976	..	...	776
Middlesex County Sanat.♦▲	TB	County	280	230	..	...	290
Murphy General Hospital	Gen	Army	566	433	20	240	3,277
Waltham Contagious Hosp.	Unit of Waltham Hospital						
Waltham Hospital▲●	Gen	NPAssn	174	166	37	841	4,346
Ware, 7,357—Hampshire							
Mary Lane Hospital▲	Gen	NPAssn	60	26	18	498	1,426
Wareham, 6,364—Plymouth							
Tobey Hospital	Gen	NPAssn	40	32	16	528	1,502
Waverley, 6,000—Middlesex							
McLean Hospital▲●	N&M	NPAssn	232	180	..	...	251
Webster, 13,196—Worcester							
Webster District Hospital▲	Gen	NPAssn	28	29	14	400	1,228
Wellesley, 15,127—Norfolk							
Channing Sanitarium	N&M	Corp	35	27	..	...	20
Wiswall Sanatorium	N&M	Indiv	30	25	..	...	14
Westboro, 6,463—Worcester							
Westboro State Hospital▲	Ment	State	1,700	1,656	..	...	536
Westfield, 18,763—Hampden							
Noble Hospital▲	Gen	Corp	75	41	15	541	3,053
Westfield State Sanatorium♦▲	TbCancer	State	220	165	..	...	500
Westwood, 3,576—Norfolk							
Westwood Lodge	N&M	Corp	21	16	..	...	50
Weymouth, 25,468—Norfolk							
South Shore Hospital▲	Gen	NPAssn	119	90	40	1,397	5,503
Whitinsville, 7,000—Worcester							
Whitinsville Hospital	Gen	NPAssn	25	9	13	150	870
Winchendon, 6,575—Worcester							
Winchendon Hospital	Gen	NPAssn	25	19	8	226	1,070
Winchester, 15,081—Middlesex							
Winchester Hospital▲	Gen	NPAssn	72	66	20	1,023	2,833
Winthrop, 16,768—Suffolk							
Winthrop Community Hosp.▲	Gen	NPAssn	64	53	20	912	2,365
Woburn, 19,751—Middlesex							
Charles Choate Memorial Hospital▲●	Gen	NPAssn	82	41	18	450	1,700

Key to symbols and abbreviations is on page 1398

MASSACHUSETTS—Continued

Hospitals and Sanatoriums	Type of Service	Ownership or Control	Beds	Average Census †	Bassinets	Number of Births	Admissions †
Worcester, 193,694—Worcester							
Belmont Hospital●●▲●	Th-Iso	City	250	107	..	...	797
Fairlawn Hospital▲	Gen	NPAssn	53	42	16	577	1,666
Harvard Private Hospital	Gen	Corp	25	11	5	43	353
Memorial Hospital●●▲●	Gen	NPAssn	185	215	30	1,858	10,197
St. Vincent Hospital●●▲●	Gen	Church	242	247	35	1,900	7,715
Worcester City Hospital●●▲●	Gen	City	440	381	60	1,256	7,850
Worcester County Sanat.▲	TB	County	130	97	..	...	74
Worcester Hahnemann Hospital●▲●	Gen	NPAssn	120	103	43	1,348	4,417
Worcester State Hospital●▲●	Ment	State	2,830	2,735	12	17	754
Related Institutions							
Andover, 11,122—Essex							
Isham Infirmary	Inst	NPAssn	50	4	..	...	689
Belchertown, 3,566—Hampshire							
Belchertown State School▲	MeDe	State	1,322	1,300	..	...	93
Boston, 77,816—Suffolk							
Bay State Hospital	Gen	Corp	35	23	8	284	2,126
Boston Home for Incurables	Incur	NPAssn	56	43	..	...	9
Florence Crittenton Home and Hospital	Mat	NPAssn	52	32	47	84	107
Hastings Home	Mat	NPAssn	36	22	11	53	96
Prendergast Preventorium	TB	NPAssn	160	56	..	...	178
Washingtonian Hospital	Drug	NPAssn	35	27	..	...	1,001
Cambridge, 110,879—Middlesex							
Holy Ghost Hospital for Incurables	Incur	Church	260	222	..	...	213
Framingham, 25,214—Middlesex							
Woodside Cottages	N&M	Corp	21	20	..	...	57
Greenfield, 15,672—Franklin							
Greenfield Isolation Hospital	Iso	City	20	3	..	...	103
Haverhill, 46,752—Essex							
Haverhill City Infirmary	Chr	City	82	76	..	...	122
Lynn, 98,125—Essex							
Lynn Health Department Hospital	Iso	City	50	15	..	...	209
Pittsfield, 49,684—Berkshire							
Pittsfield Anti-Tuberculosis Hospital	TB	NPAssn	12	11	..	...	19
Salem, 41,218—Essex							
Health Department Hosp. for Communicable Diseases	Iso	City	35	7	..	...	152
Somerville, 102,177—Middlesex							
Somerville Contagious Disease Hospital	Iso	City	34	2	..	...	67
Springfield, 149,554—Hampden							
Buscall Nursing Home	Conv	Indiv	25	9	..	...	21
City of Springfield Infirmary	Inst	City	116	105	10	...	356
Waltham, 40,620—Middlesex							
Walter E. Fernald State School▲	MeDe	State	1,540	1,826	..	...	204
Wellesley, 15,127—Norfolk							
Simpson Infirmary of Wellesley College	Inst	NPAssn	20	16	..	...	1,026
Wellesley Hills, —Norfolk							
Convalescent Home for Children	Orth	NPAssn	75	45	..	...	332
West Concord, 3,460—Middlesex							
Massachusetts Reformatory Hospital	Inst	State	30	3	..	...	366
Williamstown, 4,294—Berkshire							
Williams College Infirmary	Inst	NPAssn	20	4	..	...	310
Wrentham, 4,674—Norfolk							
Wrentham State School	MeDe	State	2,075	1,929	..	...	295

MICHIGAN

Hospitals and Sanatoriums	Type of Service	Ownership or Control	Beds	Average Census †	Bassinets	Number of Births	Admissions †
Adrian, 14,236—Lenawee							
Emma L. Bixby Hospital	Gen	City	75	44	24	949	2,843
Albion, 8,345—Calhoun							
James W. Sheldon Memorial Hospital▲	Gen	City	45	31	14	534	1,721
Allegan, 4,236—Allegan							
Allegan Health Center▲	Gen	NPAssn	40	23	13	462	1,536
Alma, 7,302—Gratiot							
Carney-Wilcox-Miller Hospital	Gen	Part	34	18	10	249	917
Michigan Masonic Home and Hospital	Inst	NPAssn	60	52	..	...	137
R. B. Smith Memorial Hosp.	Gen	NPAssn	29	20	11	569	1,772
Almont, 924—Lapeer							
Bishop Hospital	Gen	Indiv	14	8	5	173	461
Alpena, 12,836—Alpena							
Alpena General Hospital	Gen	City	78	73	21	802	3,478
Ann Arbor, 29,815—Washtenaw							
Mercywood Neuropsychiatric Hospital●	N&M	Church	40	36	..	...	448
Michigan Rapid Treatment Center	Ven	State	150	92	6	...	3,380
Neuropsychiatric Institute	Unit of University Hospital						
St. Joseph's Mercy Hosp.●●▲●	Gen	Church	250	180	64	1,410	7,591
University Hospital●▲●	Gen	State	849	748	35	852	16,101
Bad Axe, 2,626—Huron							
Hubbard Memorial Hospital	Gen	NPAssn	46	30	12	352	1,150
Battle Creek, 43,453—Calhoun							
American Legion Hospital●	TB	NPAssn	350	192	..	...	321
Arthur S. Kimball Sanat.	TB	County	70	59	..	...	121
Battle Creek Sanitarium●	Gen	NPAssn	307	199	..	...	4,015
Community Hospital▲●	Gen	NPAssn	160	80	25	1,964	5,192

MICHIGAN—Continued

Hospitals and Sanatoriums	Type of Service	Ownership or Control	Beds	Average Census †	Bassinets	Number of Births	Admissions †
Leila Y. Post Montgomery Hospital●●▲●	Gen	Church	175	127	25	983	7,157
Percy Jones General Hosp.●●▲	Gen	Army	3,861	2,931	20	267	9,335
Bay City, 47,956—Bay							
Bay City General Hospital▲	Gen	City	125	124	25	1,411	5,710
Bay City Samaritan Hospital	Gen	NPAssn	44	28	4	1	1,163
Mercy Hosp.tal●▲●	Gen	Church	135	111	25	963	5,578
Benton Harbor, 16,668—Berrien							
Mercy Hosp.tal▲●	Gen	NPAssn	90	83	26	1,602	4,483
Berrien Center, 241—Berrien							
Berrien County Hospital	Gen	County	60	36	5	21	533
Big Rapids, 4,987—Mecosta							
Community Hospital	Gen	City	37	27	12	321	1,355
Brighton, 1,355—Livingston							
Mellus Memorial Hospital	Gen	NPAssn	13	7	6	94	2,705
Cadillac, 9,855—Wexford							
Mercy Hospital▲	Gen	Church	120	47	20	655	2,582
Calumet, 1,466—Houghton							
Calumet and Hecla Hospital	Indus	NPAssn	24	18	..	...	414
Caro, 3,676—Tuscola							
Caro Community Hospital	Gen	City	15	6	9	294	530
Caro State Hospital for Epileptics	Epil	State	1,438	1,349	..	...	92
Cass City, 1,392—Tuscola							
Pleasant Home Hospital	Gen	Indiv	13	13	5	156	703
Charlevoix, 2,920—Charlevoix							
Charlevoix Hospital	Gen	NPAssn	20	19	8	253	1,485
Charlotte, 5,544—Eaton							
Hayes-Green-Beach County Memorial Hospital	Gen	County	24	15	10	307	880
Cheboygan, 5,673—Cheboygan							
Community Memorial Hosp.	Gen	NPAssn	48	34	12	417	2,373
Clare, 1,844—Clare							
Clare Hospital	Gen	NPAssn	25	11	6	65	400
Coldwater, 7,343—Branch							
Community Health Center▲	Gen	County	52	42	24	606	2,308
Crystal Falls, 2,641—Iron							
Crystal Falls Municipal Hosp.	Gen	City	17	11	5	178	636
Cutlerville (Grand Rapids P. O.), 500—Kent							
Pine Rest Sanitarium	Unit of Christian Psychopathic Hospital, Grand Rapids						
Dearborn, 63,584—Wayne							
Dearborn Diagnostic Hospital	Gen	NPAssn	65	10	20	55	548
Dearborn General Hospital	Gen	Indiv	15	2	14	386	842
Dearborn Industrial and General	Gen	NPAssn	50	37	16	1,058	2,339
St. Joseph's Retreat●	N&M	Church	350	300	..	...	802
Veterans Admin. Hospital●▲	Gen	Vet	455	447	..	...	3,437
Detroit, 1,623,452—Wayne							
Alexander Blain Hospital▲	Gen	NPAssn	60	50	8	166	1,980
Bethesda Hospital▲	TB	NPAssn	83	68	..	...	158
Charles Godwin Jennings Hospital●▲	Gen	NPAssn	83	56	25	335	2,636
Children's Hospital●▲●	Chil	NPAssn	225	166	..	...	5,577
City of Detroit Receiving Hospital●▲	Gen	City	633	604	..	...	18,183
City of Detroit Receiving Hospital (Redford Branch)▲	Gen	City	50	33	..	...	1,244
Delray General Hospital▲	Gen	NPAssn	72	51	10	600	2,532
Detroit Medical Hosp.tal▲	N&M	NPAssn	102	86	..	...	1,781
Detroit Tuberculosis Sanat.▲	TB	NPAssn	200	164	..	...	871
Dorothy Rogers General Hosp.	Gen	NPAssn	50	35	6	130	2,088
East Side General Hospital▲	Gen	NPAssn	79	65	45	1,560	4,281
Edyth K. Thomas Memorial Hospital▲	Gen	NPAssn	125	46	12	219	1,355
Evangelical Deaconess Hospital●▲●	Gen	Church	185	119	40	1,829	8,747
Fairview Sanatorium	TB	NPAssn	66	63	..	...	159
Florence Crittenton Hosp.●▲	Gen	NPAssn	300	210	75	2,025	5,754
Grace Hospital●▲●	Gen	NPAssn	450	431	64	2,324	17,708
Grace Hospital, Northwestern Branch▲	Unit of Grace Hospital						
Harper Hospital●▲●	Gen	NPAssn	600	468	85	3,084	20,948
Henry Ford Hospital●▲●	Gen	NPAssn	587	587	61	1,920	16,136
Herman Kiefer Hosp.▲●	Th-Mat	Iso City	1,300	921	68	2,652	5,441
Holy Cross Hospital	Gen	Church	103	82	50	2,003	4,551
Kretzschmar Diagnostic Clinic and Hospital	Gen	NPAssn	12	8	4	81	406
Lincoln Hospital▲	Gen	NPAssn	62	51	22	1,014	2,611
Martin Place Hospital	Gen	NPAssn	20	7	6	25	227
McGregor Convalescent Home	Conv	NPAssn	40	39	..	...	367
Mercy General Hospital	Gen	Indiv	35	20	9	22	130
Mercy Hall Hospital	Cancer	NPAssn	60	45	..	...	441
Michigan Mutual Industrial Hospital▲	Indus	NPAssn	36	21	..	...	875
Miriam Memorial Hospital	Unit of Grace Hospital						
Mt. Carmel Mercy Hosp.●▲●	Gen	Church	450	442	125	5,077	15,527
North Detroit General Hosp.	Gen	NPAssn	44	29	15	564	2,023
Parkside Hospital▲●	Gen	NPAssn	52	35	12	379	1,345
Providence Hospital●▲●	Gen	Church	346	356	114	3,855	13,667
St. Joseph's Mercy Hosp.●▲●	Gen	Church	186	118	60	2,017	6,566
St. Mary's Hospital●▲●	Gen	Church	290	211	57	2,145	9,979
Saratoga General Hospital▲●	Gen	NPAssn	110	107	35	1,280	4,767
Trinity Hospital▲	Gen	NPAssn	100	80	90	490	1,794
Trumbull General Hospital	Gen	NPAssn	42	26	13	668	...
U. S. Marine Hospital●▲●	Gen	USPHS	266	221	7	15	2,812
Warren Diagnostic Hosp.tal	Gen	Indiv	18	10	3	67	443
Wayne Diagnostic Hospital	Gen	NPAssn	110	100	34	1,070	2,752
William Booth Memorial Hospital	Mat	Church	35	29	50	1,359	1,673
Woman's Hospital●▲●	Gen	NPAssn	242	177	109	3,722	8,751

Key to symbols and abbreviations is on page 1396

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MICHIGAN—Continued

Hospitals and Sanatoriums	Type of Service	Ownership or Control	Beds	Average Census †	Bassinets	Number of Births	Admissions †
Dowagiac, 5,007—Cass							
Lee Memorial Hospital	Gen	Church	33	31	13	405	1,182
Durand, 3,127—Shiawassee							
Durand Hospital	Gen	NPAssn	16	12	6	263	773
East Grand Rapids (Reeds Lake P. O.), 4,859—Kent							
Burleson Hospital	Proct	Corp	20	19	..	....	700
Eaton Rapids, 5,060—Eaton							
Stimson Hospital	Gen	Part	15	7	8	161	450
Edmore, 825—Montcalm							
Edmore Hospital	Gen	NPAssn	18	7	5	113	315
Eloise, 1,760—Wayne							
Wayne County General Hospital and Infirmary...◇▲	Ment	County	3,807	4,210	..	....	1,098
◇●▲	GenCnr	County	3,127	2,628	..	18	6,503
William J. Seymour Hosp.●▲	Unit of Wayne County General Hospital and Infirmary						
Escanaba, 14,820—Delta							
St. Francis Hospital	Gen	Church	100	98	20	872	3,511
Flint, 151,545—Genesee							
Hurley Hospital●◇▲	Gen	City	425	349	59	3,000	18,000
St. Joseph Hospital●▲	Gen	Church	230	179	45	2,826	9,333
Women's Hospital▲	Gen	NPAssn	40	32	25	812	1,386
Fort Custer, —Calhoun							
Veterans Admin. Hospital◇▲	Ment	Vet	3,150	1,976	..	....	1,138
Fremont, 2,520—Newaygo							
Gerber Memorial Hospital	Gen	City	25	17	12	446	1,111
Gaylord, 2,055—Otsego							
Northern Michigan Tuberculosis Sanatorium	TB	State	128	122	..	....	100
Gladwin, 1,050—Gladwin							
Gladwin Hospital	Gen	Part	16	10	6	224	620
Goodrich, 470—Genesee							
Goodrich General Hospital▲	Gen	NPAssn	48	25	15	244	1,821
Grand Haven, 5,750—Ottawa							
Grand Haven Municipal Hosp.	Gen	City	44	36	18	410	2,312
Grand Rapids, 164,292—Kent							
Blodgett Memorial Hosp.●◇▲◇	Gen	NPAssn	170	145	40	1,486	5,611
Butterworth Hospital●◇▲◇	Gen	NPAssn	270	245	60	2,395	10,704
Christian Psychopathic Hosp.	N&M	NPAssn	400	370	..	....	50
City General Hospital	Conv	City	30	16	..	....	128
Ferguson-Droste-Ferguson Rectal Clinic and Hospital	Proct	Corp	100	64	..	....	1,800
Pine Rest Sanitarium	Unit of Christian Psychopathic Hospital						
St. Mary's Hospital●◇▲◇	Gen	Church	250	221	62	3,022	8,916
Sunshine Sanatorium	TB	County	135	99	..	....	117
Grayling, 2,124—Crawford							
Mercy Hospital▲	Gen	Church	45	34	5	50	1,470
Greenville, 5,321—Montcalm							
United Memorial Hospital	Gen	NPAssn	30	20	8	461	1,273
Grosse Pointe, 6,179—Wayne							
Bon Secours Hospital	Gen	Church	32	30	..	....	1,107
Cottage Hospital▲◇	Gen	NPAssn	56	38	25	729	2,637
Hamtramck, 49,839—Wayne							
St. Francis Hospital▲◇	Gen	Church	106	83	36	1,213	4,501
Hancock, 5,354—Houghton							
St. Joseph's Hospital▲◇	Gen	Church	80	67	20	691	3,116
Hart, 1,922—Oceana							
Oceana Hospital	Gen	NPAssn	20	19	7	253	2,217
Hartford, 1,694—Van Buren							
Van Buren County Hospital	Gen	County	31	30	5	30	356
Hastings, 5,175—Barry							
Pennock Hospital▲	Gen	NPAssn	35	34	8	495	1,852
Hazel Park,—Oakland							
Helene Meinke Hospital	Gen	Indiv	12	9	8	207	548
Highland Park, 50,810—Wayne							
Highland Park General Hospital●◇▲◇	Gen	City	255	210	45	2,011	8,488
Hillsdale, 6,381—Hillsdale							
Hillsdale Community Health Center▲	Gen	City	75	49	20	558	2,522
Holland, 14,616—Ottawa							
Holland City Hospital	Gen	City	56	48	20	880	2,720
Houghton, 3,636—Houghton							
Copper Country Sanatorium	TB	County	66	64	..	....	82
Howell, 3,748—Livingston							
McPherson Memorial Hosp.	Gen	City	39	34	12	338	811
Michigan State Sanatorium●▲	TB	State	434	380	..	....	286
Hudson, 2,426—Lenawee							
Thorn Memorial Hospital	Gen	City	15	12	7	243	529
Ionia, 6,282—Ionia							
Ionia County Memorial Hosp.	Gen	County	21	19	9	433	1,561
Ionia State Hospital	Ment	State	1,055	1,028	..	....	167
Iron Mountain, 11,680—Dickinson							
Iron Mountain General Hosp.	Gen	NPAssn	29	27	8	331	1,966
Ironwood, 13,309—Gogebic							
Grand View Hospital▲	GenTb	County	120	100	11	344	2,387
Newport Hospital	Gen	NPAssn	12	9	5	178	398
Ishpeming, 9,491—Marquette							
Ishpeming Hospital▲	Gen	NPAssn	50	46	18	502	1,462
Jackson, 49,656—Jackson							
W. A. Foote Memorial Hospital●▲◇	Gen	City	150	145	35	1,157	8,661
Jackson County Sanatorium●	TB	County	68	68	..	....	46
Mercy Hospital●▲◇	Gen	Church	125	101	30	1,561	5,265
Kalamazoo, 54,097—Kalamazoo							
Borgess Hospital●◇▲◇	Gen	Church	247	195	35	1,698	7,220
Bronson Methodist Hosp.●▲◇	Gen	Church	145	132	30	1,466	5,567
Fairmount Hospitals▲	Tblso	County	95	42	..	....	70
Kalamazoo State Hospital◇●	Ment	State	3,280	3,305	..	....	567
Lakeview, 682—Montcalm							
Kelsey Hospital	Gen	Part	20	11	5	220	742

MICHIGAN—Continued

Hospitals and Sanatoriums	Type of Service	Ownership or Control	Beds	Average Census †	Bassinets	Number of Births	Admissions †
Lansing, 78,753—Ingham							
Edward W. Sparrow Hosp.●▲◇	Gen	NPAssn	200	184	53	2,465	8,208
Ingham Sanatorium●▲	TB	County	136	128	..	....	267
St. Lawrence Hospital●▲◇	Gen	Church	220	176	50	2,980	7,842
Lapeer, 5,365—Lapeer							
Lapeer City Hospital	Gen	Part	18	9	4	183	675
Lapeer State Home and Training School◇	MrDe	State	4,275	4,091	3	3	192
Laurium, 3,999—Houghton							
Calumet Public Hospital	Gen	NPAssn	37	26	12	368	1,314
Ludington, 8,701—Mason							
Paulina Stearns Hospital	Gen	NPAssn	46	30	10	462	1,904
Manistee, 6,694—Manistee							
Mercy Hospital and Sanit.▲	Gen	Church	50	33	12	367	1,329
Manistique, 5,399—Schoolcraft							
Shaw General Hospital	Gen	Indiv	20	14	10	216	487
Marquette, 15,926—Marquette							
Morgan Height Sanat.●▲	TB	County	80	64	..	....	71
St. Luke's Hospital◇	Gen	NPAssn	135	126	12	480	3,872
St. Mary's Hospital	Gen	Church	65	4	14	363	1,067
Marshall, 5,258—Calhoun							
Oaklawn Hospital	Gen	NPAssn	21	16	12	289	895
Menominee, 10,230—Menominee							
St. Joseph's Hospital	Gen	Church	60	60	13	579	2,679
Midland, 10,329—Midland							
Midland Hospital▲	Gen	NPAssn	55	45	20	726	3,271
Milan, 2,340—Washtenaw							
Federal Correctional Institution	Inst	USPHS	34	17	..	....	613
Monroe, 18,478—Monroe							
Mercy Hospital▲	Gen	Church	66	56	24	1,016	3,317
Monroe Hospital	Gen	NPAssn	66	48	19	579	3,706
Morenci, 1,845—Lenawee							
Blanchard Hospital	Gen	NPAssn	14	8	6	100	472
Mount Clemens, 21,116—Macomb							
St. Joseph Hospital▲◇	Gen	Church	128	113	42	1,782	5,838
Station Hospital	Gen	Army	50	28	..	3	1,513
Mount Pleasant, 8,413—Isabella							
Central Michigan Community Hospital▲	Gen	NPAssn	50	47	12	545	2,625
Munising, 4,469—Alger							
Munising Hospital	Gen	NPAssn	28	11	5	121	479
Muskegon, 47,697—Muskegon							
Hackley Hospital●◇	Gen	NPAssn	155	144	34	1,922	6,986
Mercy Hospital●◇	Gen	Church	110	80	33	1,337	4,417
Muskegon County Sanat.▲	TB	County	75	70	..	....	72
Newberry, 2,752—Luce							
Newberry Clinic Hospital	Gen	Indiv	22	16	7	245	940
Newberry State Hospital◇	Ment	State	1,720	1,629	..	....	708
Niles, 11,328—Berrien							
Pawating Hospital	Gen	NPAssn	72	58	25	764	2,960
Northville, 3,662—Wayne							
East Lawn Sanatorium	TB	Corp	95	86	..	....	131
Sessions Hospital	Gen	NPAssn	25	20	10	355	860
Wm. H. Maybury Sanatorium (Detroit Municipal Tuberculosis Sanatorium)●▲	TB	City	843	600	..	....	841
Norway, 3,728—Dickinson							
Penn Hospital	Gen	City	15	11	7	201	546
Omer, 256—Arenac							
Omer Hospital	Gen	Indiv	16	8	5	122	270
Ontonagon, 2,290—Ontonagon							
Ontonagon Memorial Hosp.	Gen	City	32	22	9	169	1,178
Oshtemo, 235—Kalamazoo							
Pine Crest State Sanatorium	TB	State	100	83	..	....	92
Owosso, 14,424—Shiawassee							
Memorial Hospital▲	Gen	NPAssn	80	65	20	980	3,577
Paw Paw, 1,930—Van Buren							
Lake View Municipal Hospital	Gen	City	22	17	7	206	927
Petoskey, 6,079—Emmet							
Little Traverse Hospital▲	Gen	NPAssn	103	88	10	310	3,216
Lockwood General Hospital	Gen	NPAssn	50	44	10	232	1,777
Pigeon, 949—Huron							
Scheurer Hospital	Gen	NPAssn	20	15	10	226	671
Plainwell, 2,439—Allegan							
Wm. Crispe Hospital	Gen	City	25	20	11	338	856
Plymouth, 5,305—Wayne							
Plymouth Hospital	Gen	Part	7	2	3	45	122
Pontiac, 66,626—Oakland							
Oakland County Contagious Hospital	Vnlso	County	85	35	20	....	654
Oakland County Tuberculosis Sanatorium●▲	TB	County	248	157	..	....	212
Pontiac General Hospital●◇▲	Gen	City	178	147	46	1,616	7,260
Pontiac State Hospital◇	Ment	State	2,416	2,346	..	....	320
St. Joseph Mercy Hosp.●▲◇	Gen	Church	250	200	77	2,243	9,522
Port Huron, 32,759—St. Clair							
Port Huron Hospital▲	Gen	NPAssn	130	116	34	1,306	6,070
Powers, 258—Menominee							
Pinecrest Sanatorium▲	TB	Counties	145	126	..	....	113
Reed City, 1,845—Osceola							
Reed City Hospital	Gen	City	31	24	8	393	2,213
River Rouge, 17,616—Wayne							
Sidney A. Sumby Memorial Hospital	Gen	NPAssn	38	17	12	191	734
Rochester, 3,750—Oakland							
Haven Sanitarium	N&M	Corp	43	39	..	....	337
Romeo, 2,627—Macomb							
Wehenkel Tuberculosis Sanatorium	TB	Indiv	40	36	..	....	171
Royal Oak, 25,087—Oakland							
Oakland Center Hospital	Gen	NPAssn	12	8	..	....	342
Royal Oak General Hospital	Gen	City	24	21	12	404	1,469

Key to symbols and abbreviations is on page 1398

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MICHIGAN—Continued

Hospitals and Sanatoriums	Type of Service	Ownership or Control	Beds	Average Census†	Residents	Interns	Number of Births	Admissions†
Saginaw, 82,794—Saginaw								
Saginaw County Hospitals	Tblso	County	175	161	..	...		457
Saginaw County Infirmary Hospital	Gen	County	44	40	..	...		255
Saginaw General Hosp.ΦΦΔ	Gen	NPAssn	204	158	50	1,680	7,845	
St. Luke's Hospitals	Gen	Church	61	49	18	67	2,969	
St. Mary's HospitalΦΦΔ	Gen	Church	168	139	36	1,254	6,419	
St. Clair, 5,471—St. Clair								
St. Clair Community Hosp.	Gen	City	19	12	10	398	782	
St. Johns, 4,422—Clinton								
Clinton Memorial Hospitals	Gen	NPAssn	50	45	20	607	2,236	
St. Joseph, 8,263—Berrien								
St. Joseph Michigan Hosp.Δ	Gen	NPAssn	38	26	12	284	1,713	
Sault Ste. Marie, 15,847—Chippewa								
Chippewa County War Memorial Hospitals	Gen	County	130	109	21	883	4,589	
Sault Ste. Marie State Hosp.	Ment	State	530	488	..	...	41	
Shelby, 1,367—Oceana								
Shelby Hospital	Gen	City	10	6	5	85	797	
South Haven, 4,745—Van Buren								
South Haven Hospitals	Gen	City	42	34	12	301	1,500	
Stambaugh, 2,081—Iron								
General Hospital Company of Iron River District	Gen	NPAssn	28	6	12	330	923	
Sturgis, 7,214—St. Joseph								
Sturgis Memorial Hospitals	Gen	City	40	33	10	681	1,785	
Tecumseh, 2,921—Lenawee								
Tecumseh Hospital	Gen	City	34	27	16	381	1,319	
Three Rivers, 6,710—St. Joseph								
Three Rivers Hospitals	Gen	City	34	31	8	455	1,530	
Traverse City, 14,455—Grand Traverse								
Boardman Valley Hospital	Gen	County	24	16	4	39	387	
James Decker Munson Hosp.Δ	Gen	State	128	118	17	770	3,564	
Traverse City State Hosp.ΦΔ	Ment	State	2,781	2,708	..	...	662	
Wakefield, 3,501—Gogebic								
Wakefield Hospital	Gen	Church	15	12	6	179	536	
Wayne, 4,223—Wayne								
Wayne Clinic Hospital	Gen	Indiv	15	8	6	148	572	
Wayne General Hospital	Gen	Indiv	25	16	9	315	1,590	
West Branch, 1,962—Ogemaw								
Tolfree Memorial Hospital	Gen	City	20	16	5	295	1,246	
Wyandotte, 30,618—Wayne								
Wyandotte General Hosp.ΦΔ	Gen	City	173	133	42	2,129	7,298	
Ypsilanti, 12,121—Washtenaw								
Beyer Memorial Hospitals	Gen	City	137	81	37	1,706	4,879	
Hull Memorial City Hospital, Unit of Beyer Memorial Hospital								
Leland Sanatoriums	TB	NPAssn	100	57	..	...	69	
Ypsilanti State HospitalΦΔ	Ment	State	3,400	3,364	..	...	739	
Zeeland, 3,067—Ottawa								
Thomas G. Huizinga Memorial Hospital	Gen	NPAssn	15	10	8	297	654	
Related Institutions								
Ann Arbor, 29,815—Washtenaw								
Ann Arbor School	MeDe	Indiv	50	40	..	...	39	
Coldwater, 7,343—Branch								
Coldwater State Home and Training School	MeDe	State	1,246	1,111	..	...	142	
Detroit, 1,623,452—Wayne								
Barnett Clinic and Hospital	ENT	NPAssn	15	1	..	...	416	
Central Hospital	Gen	Indiv	21	10	..	...	182	
Denike Sanitarium	Alcoh	N&M Corp	130	94	..	...	170	
Doctors' Hospital	Conv	Indiv	35	28	..	...	435	
General Hospital and Clinic	TB	Indiv	46	44	..	...	122	
Good Samaritan Hospital	Conv	NPAssn	29	25	..	...	19	
Douglas, 421—Allegan								
Community Hospital	Gen	NPAssn	15	8	6	100	326	
East Grand Rapids (Reeds Lake P. O.), 4,809—Kent								
O'Keefe Sanitarium	Conv	Corp	31	30	..	...	47	
Farmington, 1,510—Oakland								
Children's Hospital Convalescent Home	Conv	NPAssn	200	62	..	...	288	
Ferndale, 22,523—Oakland								
Ardmore Hospital	Gen	NPAssn	22	14	12	328	1,177	
Flint, 151,543—Genesee								
Genesee County Hospital and Infirmary	InstGen	County	100	90	10	...	232	
Grand Rapids, 164,292—Kent								
Kent County Receiving Hosp.	Ment	County	28	14	..	...	479	
Mary Free Bed Guild Convalescent Home	Orth	NPAssn	90	50	4	...	311	
Michigan Veterans Facility Hospital	Inst	State	275	250	..	...	270	
Salvation Army Evangeline Booth Home and Hospital	Mat	Church	40	40	30	188	237	
Jackson, 49,656—Jackson								
Florence Crittenton Home and Hospital	Mat	NPAssn	20	18	10	58	64	
Jackson County Isolation Hospital	Iso	County	40	9	..	...	297	
Southern Michigan Prison Hospital	Inst	State	200	119	..	...	2,333	
Lansing, 78,753—Ingham								
Boys' Vocational School Hospital	Inst	State	45	9	..	...	1,822	
Ingham County Convalescent Hospital	Conv	County	50	7	..	...	107	
Marquette, 15,928—Marquette								
Marquette Branch Prison Hospital	Inst	State	24	4	..	...	60	
Mount Clemens, 14,526—Macomb								
Sigma Gamma Hosp. School	Orth	NPAssn	50	34	..	...	141	

MICHIGAN—Continued

Related Institutions	Type of Service	Ownership or Control	Beds	Average Census†	Residents	Interns	Number of Births	Admissions†
Mount Pleasant, 8,413—Isabella								
Mount Pleasant State Home and Training School	MeDe	State	380	374	..	...	22	
Northville, 3,032—Wayne								
Wayne County Training School	MeDe	County	835	665	..	...	152	
Plainwell, 2,424—Allegan								
Del Vista Sanitarium	N&M	Corp	35	20	..	...	220	
Pontiac, 66,626—Oakland								
Oakland County Infirmary	Inst	County	200	200	..	...	493	
Port Huron, 32,759—St. Clair								
Port Huron Emergency Hosp.	Iso	City	18	3	5	...	84	
Romulus, 755—Wayne								
Romulus Hospital	Gen	NPAssn	15	3	6	46	122	
Stockbridge, 682—Ingham								
Bowe Memorial Hospital	Gen	Indiv	10	4	5	156	270	
Trenton, 5,294—Wayne								
Trenton Hospital	Mat	Indiv	17	14	17	346	352	
Vicksburg, 1,774—Kalamazoo								
Franklin Memorial Hospital	Gen	City	11	7	6	113	435	

MINNESOTA

Hospitals and Sanatoriums	Type of Service	Ownership or Control	Beds	Average Census†	Residents	Interns	Number of Births	Admissions†
Ada, 1,958—Norman								
Ada Municipal Hospital	Gen	City	25	18	8	160	730	
Adrian, 1,976—Nobles								
Adrian Hospital	Gen	NPAssn	17	14	6	168	671	
Ah-gwah-ching, 15—Cass								
Minnesota State SanatoriumΔ	TB	State	355	261	..	...	429	
Albert Lea, 12,206—Freeborn								
Naeve HospitalΦ	Gen	NPAssn	85	70	25	929	5,216	
Alexandria, 5,051—Douglas								
Our Lady of Mercy Hosp.Δ	Gen	Church	28	23	10	260	1,488	
St. Luke's Hospital	Gen	NPAssn	33	23	12	219	829	
Anoka, 6,458—Anoka								
Anoka Hospital	Gen	NPAssn	16	8	9	184	492	
Anoka State Hospitals	Ment	State	1,400	1,339	..	...	120	
Appleton, 1,877—Swift								
Kaufman Hospital	Gen	Indiv	25	10	5	90	645	
Austin, 15,267—Mower								
St. Olaf Hospital	Gen	NPAssn	105	90	20	919	4,155	
Battle Lake, 623—Otter Tail								
Otter Tail County Sanatorium	TB	County	48	25	..	...	17	
Benedict, 9,427—Beltrami								
Lutheran Hospitals	Gen	NPAssn	75	48	18	451	2,324	
Benson, 2,729—Swift								
Swift County Hospital	Gen	NPAssn	27	18	10	209	1,009	
Bertha, 578—Todd								
Thiel Hospital	Gen	NPAssn	20	15	8	278	915	
Bigfork, 382—Itasca								
Northern Itasca Hospital	Gen	City	11	10	4	82	466	
Biwabik, 1,204—St. Louis								
Biwabik Hospital	Gen	Indiv	10	7	7	117	306	
Braham, 578—Isanti								
Braham Community Hospital	Gen	NPAssn	26	6	7	16	119	
Brainerd, 12,071—Crow Wing								
St. Joseph's Hospitals	Gen	Church	75	60	16	791	4,045	
Breckenridge, 2,745—Wilkin								
St. Francis HospitalΦ	Gen	Church	86	77	14	516	2,900	
Buffalo, 1,695—Wright								
Catlin Hospital	Gen	Part	10	4	4	59	179	
Buhl, 1,850—St. Louis								
Range Hospital	InstGen	County	46	44	..	...	168	
Caledonia, 1,965—Houston								
Caledonia Hospital	Gen	Indiv	14	9	6	121	562	
Cambridge, 1,592—Isanti								
Minnesota Colony for Epileptics	Epil	State	1,108	1,054	..	...	64	
Cannon Falls, 1,548—Goodhue								
Mineral Springs Sanatorium	TB	Counties	110	97	..	...	120	
Cass Lake, 1,504—Cass								
Cass Lake Indian Hospital	Gen	IA	36	17	4	136	933	
Chisholm, 7,467—St. Louis								
Mesaba Clinic Hospital	Gen	Part	18	10	5	154	500	
Cloquet, 7,304—Carlton								
Fond du Lac Indian Hospital	Gen	IA	22	13	4	62	404	
Raiter Hospitals	Gen	NPAssn	36	30	12	270	1,245	
Cokato, 1,175—Wright								
Cokato Hospital	Gen	Indiv	19	10	6	100	466	
Crookston, 7,161—Polk								
Bethesda Hospitals	Gen	Church	54	54	12	274	2,250	
St. Vincent's Hospitals	Gen	Church	65	60	15	370	2,297	
Sunnycrest Sanatorium	TB	Counties	60	36	..	...	45	
Crosby, 2,554—Crow Wing								
Miner's Hospital	Gen	NPAssn	25	5	6	172	683	
Dawson, 1,646—Lac Qui Parle								
Dawson Hospital	Gen	NPAssn	45	25	7	108	992	
Deerwood, 576—Crow Wing								
Deerwood Sanatorium	TB	Counties	36	14	..	...	20	
Detroit Lakes, 5,015—Becker								
St. Mary's Hospitals	Gen	Church	60	57	15	487	3,022	
Duluth, 101,065—St. Louis								
Miller Memorial Hospitals	Gen	City	83	73	..	...	1,172	
St. Luke's HospitalΦΔ	Gen	NPAssn	237	240	33	1,941	9,738	
St. Mary's HospitalΦΔ	Gen	Church	265	270	35	1,517	10,609	
Ely, 5,970—St. Louis								
Shipman Hospital	Gen	Part	18	10	5	61	500	
Eveleth, 6,567—St. Louis								
More Hospital and Clinic	Gen	NPAssn	30	18	10	141	771	

Key to symbols and abbreviations is on page 1398

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MINNESOTA—Continued

Hospitals and Sanatoriums	Type of Service	Ownership or Control	Beds	Average Census †	Residents	Number of Births	Admissions †
Fairmont, 6,998—Martin							
Fairmont Community Hosp..	Gen	NPAssn	50	44	11	531	2,010
Faribault, 14,527—Rice							
Minnesota School for Feebleminded‡	MeDe	State	2,535	2,506	16	11	245
St. Lucas Evangelical Deaconess Hospital‡	Gen	Church	64	51	20	566	2,870
Farmington, 1,580—Dakota							
Sanford Hospital	Gen	NPAssn	30	12	4	112	529
Fergus Falls, 10,858—Otter Tail							
Fergus Falls State Hospital‡	Ment	State	2,000	1,800	..	....	449
George B. Wright Memorial Hospital‡	Gen	NPAssn	50	47	12	207	1,874
St. Luke's Hospital‡	Gen	NPAssn	67	71	15	469	1,997
Fosston, 1,271—Polk							
Fosston Hospital	Gen	Part	12	8	6	223	543
Glencoe, 2,387—McLeod							
Glencoe Municipal Hospital	Gen	City	38	30	12	330	1,335
Glenwood, 2,564—Pope							
Glenwood Community Hosp.‡	Gen	City	26	24	10	252	1,145
Graceville, 1,020—Big Stone							
Holy Trinity Hospital‡	Gen	Church	28	27	10	261	1,550
Grand Rapids, 4,875—Itasca							
Itasca County Hospital‡	Gen	County	66	48	20	707	2,602
Granite Falls, 2,388—Yellow Medicine							
Granite Falls Hospital	Gen	NPAssn	17	14	5	188	536
Riverside Sanatorium	TB	Counties	48	30	..	....	35
Hallock, 1,353—Kittson							
Kittson War Veterans' Memorial Hospital	Gen	NPAssn	32	25	10	195	976
Hastings, 5,062—Dakota							
Hastings State Hospital	Ment	State	1,131	1,086	..	....	75
Hendricks, 740—Lincoln							
Hendricks Community Hosp.	Gen	NPAssn	30	29	8	198	1,738
Heron Lake, 852—Jackson							
Heron Lake Hospital	Gen	NPAssn	10	No data supplied			
Hibbing, 16,345—St. Louis							
Hibbing General Hospital‡	Gen	Church	132	107	20	742	4,540
Hutchinson, 3,887—McLeod							
Hutchinson Community Hospital	Gen	NPAssn	45	37	12	413	1,360
Lake City, 3,364—Wabasha							
Lake City Hospital	Gen	City	32	26	9	152	804
Lake Park, 654—Becker							
Sand Beach Sanatorium	TB	Counties	42	21	..	....	21
Litchfield, 3,920—Meeker							
Litchfield Hospital	Gen	NPAssn	45	37	12	367	1,987
Little Falls, 6,047—Morrison							
St. Gabriel's Hospital‡	Gen	Church	100	81	20	632	3,720
Littlefork, 608—Koochiching							
Littlefork Hospital	Gen	NPAssn	22	20	8	241	1,055
Long Prairie, 2,317—Todd							
Long Prairie Hospital	Gen	NPAssn	20	13	8	190	618
Luverne, 3,114—Rock							
Luverne Municipal Hospital	Gen	City	15	12	10	250	961
Madison, 2,212—Lac Qui Parle							
Ebenezer Lutheran Hospital	Gen	Church	19	16	7	146	852
Mahnomen, 1,429—Mahnomen							
St. Anthony's Hospital	Gen	Church	19	10	6	170	631
Mankato, 15,654—Blue Earth							
Immanuel Hospital	Gen	Church	65	68	15	594	2,952
St. Joseph's Hospital‡	Gen	Church	116	78	26	674	3,730
Marshall, 4,566—Lyon							
Anna Maria Memorial Hosp.	Gen	Indiv	16	15	9	345	815
Marshall Hospital	Gen	NPAssn	30	15	5	169	634
Melrose, 2,015—Stearns							
Melrose Hospital	Gen	Corp	23	16	8	338	1,195
Milaca, 1,627—Mille Lacs							
Memorial Hospital	Gen	NPAssn	15	14	6	228	713
Minneapolis, 492,370—Hennepin							
Abbott Hospital‡*‡	Gen	Church	150	129	24	1,018	7,353
Asbury Hospital‡*‡	Gen	Church	148	138	25	791	6,205
Eitel Hospital‡*‡	Gen	NPAssn	120	107	18	805	4,431
Elizabeth Kenny Institute	Orth	NPAssn	120	115	..	....	219
Elliot Memorial Hospital	Unit of University Hospitals						
Fairview Hospital‡*‡	Gen	Church	186	160	43	1,661	7,508
Franklin Hospital	ChrConv	Corp	70	68	..	....	159
George Chase Christian Memorial Cancer Institute	Unit of University Hospitals						
Janney Children's Hospital	Unit of Abbott Hospital						
Lutheran Deaconess Home and Hospital‡*‡	Gen	Church	120	116	40	1,374	5,925
Maternity Hospital‡*‡	Mat	NPAssn	36	25	45	1,370	1,408
Minneapolis General Hospital‡*‡	Gen	City	574	557	55	591	9,259
Minnesota General Hospital	See University Hospitals						
Northwestern Hospital‡*‡	Gen	NPAssn	262	230	40	1,747	9,200
Ripley Memorial Hospital	Unit of Maternity Hospital						
St. Andrew's Hospital‡	Gen	NPAssn	82	65	18	455	2,520
St. Barnabas Hospital‡*‡	Gen	NPAssn	190	162	50	2,143	8,419
St. Mary's Hospital‡*‡	Gen	Church	310	280	65	3,020	12,800
Sheltering Arms Hospital‡	Orth	NPAssn	49	34	..	....	93
Shriners Hospital for Crippled Children‡	Orth	NPAssn	60	51	..	....	116
Swedish Hospital‡*‡	Gen	NPAssn	300	248	72	2,955	11,734
Todd Memorial Eye, Ear, Nose and Throat Hospital	Unit of University Hospitals						
University Hospitals‡*‡	Gen	State	450	397	25	328	9,532
Veterans Admin. Hospital‡	Gen	Vet	1,050	865	..	....	8,216
William Henry Eustis Children's Hospital	Unit of University Hospitals						
Montevideo, 5,729—Chippewa							
Montevideo Hospital	Gen	NPAssn	50	35	10	442	1,918

MINNESOTA—Continued

Hospitals and Sanatoriums	Type of Service	Ownership or Control	Beds	Average Census †	Residents	Number of Births	Admissions †
Moorhead, 9,491—Clay							
St. Ansgars Hospital	Gen	Church	52	37	10	342	1,510
Moose Lake, 1,432—Carlton							
Moose Lake Community Hospital	Gen	Indiv	18	10	4	171	808
Moose Lake State Hospital‡	Ment	State	1,012	971	..	....	351
Mora, 1,494—Kanabec							
Kanabec Hospital	Gen	County	22	26	8	293	1,950
Morris, 3,214—Stevens							
Morris Hospital	Gen	Indiv	16	12	6	123	513
Stevens County Hospital	Gen	NPAssn	18	12	7	168	609
Mountain Lake, 1,745—Cottonwood							
Basinger Clinic Hospital	Gen	NPAssn	30	16	..	....	668
Bethel Hospital	Gen	NPAssn	21	13	8	194	686
New Prague, 1,641—Le Sueur							
New Prague Community Hospital	Gen	NPAssn	18	12	6	204	624
New Ulm, 6,745—Brown							
Loretto Hospital	Gen	Church	50	37	10	334	1,578
Union Hospital	Gen	NPAssn	69	48	12	300	1,776
Nopeming, 75—St. Louis							
Nopeming Sanatorium‡‡	TB	County	280	277	..	....	217
Northfield, 4,525—Rice							
Northfield City Hospital	Gen	City	32	23	12	308	1,424
Oak Terrace, 200—Hennepin							
Christian Memorial Tuberculosis Hospital	Unit of Glen Lake Sanatorium						
Glen Lake Sanatorium‡‡	TB	County	680	542	..	11	484
Ortonville, 2,469—Big Stone							
Ortonville Municipal Hosp.	Gen	City	20	13	8	200	712
Owatonna, 8,694—Steele							
Owatonna City Hospital	Gen	City	50	42	15	484	1,970
Parkers Prairie, 781—Otter Tail							
Leibold Hospital	Gen	NPAssn	14	4	6	102	254
Park Rapids, 2,645—Hubbard							
St. Joseph's Hospital	Gen	Church	44	17	13	251	895
Paynesville, 1,317—Stearns							
Myre Hospital	Gen	Part	9	4	3	48	208
Perham, 1,534—Otter Tail							
St. James' Hospital	Gen	Church	40	28	6	297	1,402
Pine City, 1,718—Pine							
Lakeside Memorial Hospital	Gen	NPAssn	30	16	6	65	332
Pipestone, 4,682—Pipestone							
Ashton Memorial Hospital	Gen	NPAssn	45	32	12	386	2,101
Preston, 1,447—Fillmore							
Preston Hospital	Gen	Indiv	13	11	7	177	226
Princeton, 1,855—Mille Lacs							
Community Hospital	Gen	NPAssn	25	....	9	Estab. 1947	
Pupesky, 75—Beltrami							
Lake Julia Tuberculosis Sanatorium	TB	Counties	52	42	..	....	38
Redlake, 150—Beltrami							
Redlake Indian Hospital	Gen	IA	23	10	6	108	497
Red Wing, 9,562—Goodhue							
Red Wing Hospital	Gen	City	40	28	9	149	1,046
St. John's Hospital‡	Gen	NPAssn	90	73	20	744	2,827
Redwood Falls, 3,270—Redwood							
Redwood Falls Municipal Hospital	Gen	City	23	14	8	301	960
Richmond, 634—Stearns							
Richmond Hospital	Gen	NPAssn	11	8	4	96	600
Rochester, 30,512—Olmsted							
Colonial Hospital‡	Gen	Corp	258	242	..	....	8,422
Kahler Hospital‡	Gen	Corp	130	121	..	....	4,651
Rochester State Hospital‡*‡	Ment	State	1,571	1,600	..	....	661
St. Mary's Hospital‡	Gen	Church	848	735	61	1,237	16,906
Worrall Hospital‡	ENTSkt's	Corp	100	107	..	....	1,256
Roseau, 1,775—Roseau							
Budd Hospital	Gen	NPAssn	25	12	10	273	791
Rush City, 1,020—Chisago							
Rush City Hospital	Gen	City	21	22	7	343	1,044
St. Cloud, 24,173—Stearns							
Minnesota State Reformatory Hospital	Inst	State	30	9	..	....	288
St. Cloud Hospital‡*‡	Gen	Church	276	277	54	2,037	10,007
Veterans Admin. Hospital‡*‡	Ment	Vet	1,532	1,317	..	....	509
St. James, 3,460—Watonwan							
St. James Hospital	Gen	Church	26	23	10	149	816
St. Paul, 287,736—Ramsey							
Ancker Hospital‡*‡	Gen	Th CyCo	850	540	55	222	7,029
Bethesda Hospital‡*‡	Gen	Church	162	144	38	1,962	7,162
Charles T. Miller Hosp.‡*‡	Gen	NPAssn	275	241	50	2,191	8,683
Children's Hospital‡	Chil	NPAssn	82	66	..	....	2,260
Gillette State Hospital for Crippled Children‡*‡	Orth	State	225	170	..	....	733
Midway Hospital‡*‡	Gen	Church	125	103	23	1,642	5,380
Mounds Park Hospital‡	Gen	Church	132	129	14	624	3,718
Northern Pacific Beneficial Association Hospital‡*‡	Gen	NPAssn	135	90	..	....	3,492
Ramsey County Tuberculosis Pavilion	Unit of Ancker Hospital						
St. John's Hospital‡	Gen	Church	70	60	15	721	3,415
St. Joseph's Hospital‡*‡	Gen	Church	260	230	50	2,308	9,497
St. Luke's Hospital	Gen	NPAssn	105	78	24	641	3,369
Salvation Army Booth Memorial Hospital	Mat	Church	50	47	9	208	263
Samaritan Hospital	Gen	NPAssn	28	23	..	....	398
West Side General Hospital	Gen	Church	55	47	15	413	2,123
St. Peter, 5,870—Nicollet							
Community Hospital	Gen	City	30	8	11	275	1,695
St. Peter State Hospital‡*‡	Ment	State	2,250	2,209	..	....	723
Sandstone, 1,259—Pine							
Federal Correctional Institution‡	Inst	USPHS	97	4	..	....	189

Key to symbols and abbreviations is on page 1398

MINNESOTA—Continued

Hospitals and Sanatoriums	Type of Service	Ownership or Control	Beds	Average Census †	Bassinets	Number of Births	Admissions †
Shakopee, 2,418—Scott							
St. Francis Home and Hosp.	Gen	Church	20	16	8	276	700
Slayton, 1,587—Murray							
Home Hospital	Gen	NPAssn	25	19	8	298	1,127
Sleepy Eye, 2,923—Brown							
Sleepy Eye Municipal Hosp.	Gen	City	30	13	10	242	683
Springfield, 2,261—Brown							
St. John's Hospital	Gen	Church	25	19	8	169	985
Spring Grove, 967—Houston							
Spring Grove Hospital	Gen	NPAssn	18	12	7	98	760
Staples, 2,502—Todd							
Staples Municipal Hospital	Gen	City	25	18	8	152	1,342
Starbuck, 972—Pope							
Minnewaska Hospital	Gen	NPAssn	15	12	4	80	350
Stillwater, 7,013—Washington							
Lakeview Memorial Hospital‡	Gen	CyCo	57	37	8	373	1,415
Minnesota State Prison Hospital‡	Inst	State	65	30	..	....	160
Thief River Falls, 6,019—Pennington							
Mercy Hospital	Gen	NPAssn	28	24	8	375	1,447
Oakland Park Sanatorium	TB	Counties	45	43	..	....	17
St. Luke's Hospital‡	Gen	NPAssn	40	30	6	190	1,069
Tracy, 3,085—Lyon							
Clinic Hospital	Gen	Corp	16	7	6	109	516
Tracy Hospital	Gen	NPAssn	35	23	12	188	899
Two Harbors, 4,046—Lake							
Two Harbors Hospital	Gen	NPAssn	33	23	8	134	740
Tyler, 1,005—Lincoln							
Tyler Hospital	Gen	City	35	30	10	283	1,210
Virginia, 12,564—St. Louis							
Virginia Municipal Hospital‡	Gen	City	101	77	25	685	3,529
Wabasha, 2,368—Wabasha							
Buena Vista Sanatorium	TB	Counties	30	27	..	....	61
St. Elizabeth's Hospital	Gen	Church	78	41	10	300	1,270
Waconia, 1,315—Carver							
Nagel Hospital	Gen	Indiv	28	19	8	94	542
Wadena, 2,916—Wadena							
Fair Oaks Lodge Sanatorium	TB	Counties	34	20	..	....	25
Wesley Hospital‡	Gen	NPAssn	45	35	12	409	1,701
Walker, 939—Cass							
Walker Hospital	Gen	Indiv	13	3	6	59	184
Warren, 1,639—Marshall							
Warren Hospital‡	Gen	Church	40	29	10	216	1,261
Warroad, 1,309—Roseau							
Warroad Municipal Hospital	Gen	City	25	13	6	123	521
Waseca, 4,270—Waseca							
Waseca Memorial Hospital	Gen	CyCo	25	7	9	308	917
White Earth, 350—Becker							
White Earth Indian Hospital	Gen	IA	21	13	8	117	492
Willmar, 7,622—Kandiyohi							
Rice Memorial Hospital	Gen	City	95	50	18	808	3,651
Willmar State Hospital	Ment	State	1,450	1,426	..	....	298
Windom, 2,867—Cottonwood							
Windom Hospital	Gen	NPAssn	28	24	10	284	934
Winnebago, 1,992—Faribault							
Winnebago Community Hosp.	Gen	Part	12	10	4	134	692
Winona, 22,490—Winona							
Winona General Hospital‡	Gen	NPAssn	112	100	20	983	2,986
Worthington, 5,918—Nobles							
Southwestern Minnesota Sanatorium	TB	Counties	54	36	..	....	35
Worthington Hospital	Gen	NPAssn	34	31	12	374	1,920

Related Institutions

Blue Earth, 3,702—Faribault							
Blue Earth Community Hosp.	Gen	City	14	....	8	Estab. 1947	
Comfrey, 555—Brown							
Comfrey Hospital	Gen	NPAssn	8	....	4	....	....
Hastings, 5,602—Dakota							
St. Francis Hospital	Gen	NPAssn	30	16	3	14	156
Madelia, 1,652—Watonwan							
Madelia Hospital	Gen	City	10	4	4	76	292
Minneapolis, 492,370—Hennepin							
Glenwood Hills Hospitals	N&M	NPAssn	48	32	..	....	507
Homewood Hospital	Unit of Glenwood Hills Hospitals						
Minnesota Soldiers Home Hospital	Inst	State	85	62	..	....	236
Parkview Hospital	Chr	NPAssn	165	140	..	....	292
Rest Hospital	N&M	Part	21	21	..	....	259
Vocational Nursing Home	Conv	NPAssn	33	29	..	....	25
Women's Welfare League Home for Convalescents	Conv	NPAssn	25	19	..	....	34
Owatonna, 8,094—Steele							
Minnesota State Public School Hospital	Inst	State	50	11	..	....	637
Pelican Rapids, 1,559—Otter Tail							
Pelican Valley Hospital	Gen	NPAssn	15	5	3	76	429
Pipestone, 4,682—Pipestone							
Pipestone General Indian Hospital	Gen	IA	36	9	4	12	335
Red Wing, 9,562—Goodhue							
Minnesota State Training School for Boys	Inst	State	25	6	..	....	831
St. Paul, 287,736—Ramsey							
Children's Preventorium of Ramsey County	TB	CyCo	60	61	..	....	6
Summit Ave. Rest Hospital	N&M	Indiv	28	28	..	....	96
Shakopee, 2,418—Scott							
Mudcura Sanitarium	Conv	Corp	75	45	..	....	1,863
Wayzata, 1,473—Hennepin							
Minnetonka Hospital	Gen	NPAssn	15	8	7	89	353

MISSISSIPPI

Hospitals and Sanatoriums	Type of Service	Ownership or Control	Beds	Average Census †	Bassinets	Number of Births	Admissions †
Aberdeen, 4,746—Monroe							
Aberdeen Hospital	Gen	NPAssn	28	8	8	184	685
Amory, 3,227—Monroe							
Gilmore Sanitarium	Gen	NPAssn	24	14	6	204	1,133
Baldwyn, 1,279—Lee							
Baldwyn Hospital	Gen	NPAssn	12	10	3	136	726
Biloxi, 17,475—Harrison							
New Biloxi Hospital‡	Gen	City	72	35	18	700	3,059
Station Hospital‡	Gen	Army	400	180	18	340	3,825
Veterans Admin. Center‡	Gen	Vet	228	206	..	....	2,345
Booneville, 1,865—Prentiss							
North East Mississ. Gen. Hosp.	Gen	NPAssn	40	43	15	391	1,662
Brandon, 1,184—Rankin							
Brandon Hospital	Gen	Indiv	50	17	6	174	600
Brookhaven, 6,232—Lincoln							
Kings Daughters Hospital	Gen	NPAssn	90	65	24	657	4,200
Canton, 6,041—Madison							
Kings Daughters Hospital	Gen	NPAssn	40	18	8	227	1,410
Centreville, 1,163—Wilkinson							
Field Memorial Community Hospital	Gen	Counties	28	21	8	165	1,091
Charleston, 2,109—Tallahatchie							
Tallahatchie Hospital	Gen	Indiv	35	22	6	145	1,229
Clarksdale, 12,108—Coahoma							
Clarksdale Hospital	Gen	NPAssn	32	23	14	335	1,567
Cleveland, 4,182—Bolivar							
City Hospital	Gen	City	25	17	10	208	1,076
Columbia, 6,064—Marion							
Columbia Clinic Hospital	Gen	NPAssn	37	19	6	78	1,118
Daly Hospital	Gen	Indiv	25	20	6	247	1,876
Columbus, 13,645—Lowndes							
Columbus Hospital	Gen	NPAssn	30	24	11	360	1,574
Doster Hospital and Clinic	Gen	NPAssn	38	25	11	171	1,476
Corinth, 7,818—Alcorn							
Corinth Hospital	Gen	Indiv	20	13	9	233	802
Greenville, 20,882—Washington							
Kings Daughters Hospital‡	Gen	NPAssn	118	96	24	522	4,580
Greenwood, 14,767—Leflore							
Delta Medical Center	Ven	State	250	193	..	....	7,277
Greenwood Colored Hospital	Gen	Part	25	9	2	24	754
Greenwood-Leflore Hospital	Gen	CyCo	58	49	27	552	2,536
Grenada, 5,851—Grenada							
Grenada General Hospital	Gen	Indiv	68	33	15	228	1,700
Gulfport, 15,195—Harrison							
Memorial Hospital	Gen	CyCo	106	49	18	702	3,160
Veterans Admin. Hospital‡	Ment	Vet	1,088	1,032	..	....	1,250
Hattiesburg, 21,026—Forrest							
Methodist Hospital	Gen	Church	75	68	18	1,019	3,323
South Mississippi Infirmary	Gen	Indiv	70	34	15	357	2,555
Houston, 1,729—Chickasaw							
Houston Hospital	Gen	NPAssn	30	30	8	244	1,999
Indianola, 3,604—Sunflower							
Kings Daughters Hospital	Gen	NPAssn	27	15	6	142	1,036
Jackson, 62,107—Hinds							
Mississippi Baptist Hosp.	Gen	Church	180	197	35	1,692	10,501
Mississippi State Charity Hospital	Gen	State	101	72	4	27	1,513
St. Dominic's Hospital	Gen	Church	76	55	13	567	4,065
Veterans Admin. Hospital	Gen	Vet	650	458	..	....	6,954
Dr. Willis Walley Hospital	Gen	NPAssn	25	10	10	16	630
Kosciusko, 4,261—Attala							
Montfort Jones Memorial Hospital	Gen	City	50	34	12	464	2,280
Laurel, 20,358—Jones							
Laurel General Hospital	Gen	Indiv	60	48	8	370	2,905
South Mississippi Charity Hospital	Gen	State	110	50	15	322	2,400
Lexington, 2,930—Holmes							
Holmes County Community Hospital	Gen	County	25	14	6	183	1,313
Macon, 2,261—Noxubee							
Macon Hospital	Gen	NPAssn	30	14	7	132	849
Magee, 1,221—Simpson							
Magee General Hospital	Gen	Part	28	21	10	418	1,824
Marks, 1,818—Quitman							
Marks Hospital	Gen	Indiv	11	1	4	120	604
McComb, 9,808—Pike							
McComb City Hospital	Gen	NPAssn	26	20	7	292	1,669
McComb Infirmary	Gen	NPAssn	28	28	4	300	1,671
Meridian, 35,481—Lauderdale							
Anderson Infirmary	Gen	NPAssn	68	65	14	539	3,350
East Mississippi State Hosp.	Ment	State	840	725	..	....	241
Hoye's Sanitarium	N&M	Indiv	37	34	..	....	618
Lewis Hospital	Gen	Indiv	12	7	5	92	545
Matty Hersee Hospital	Gen	State	100	53	8	186	1,449
Meridian Public Health Treatment Center	Ven	State	300	204	6	6	6,163
Riley's Hospital	Gen	NPAssn	45	27	10	226	1,939
Rush's Infirmary	Gen	Part	92	51	16	190	3,670
St. Joseph Hospital	Gen	Church	60	30	14	345	1,974
Morton, 854—Scott							
Scott County Hospital	Gen	Part	22	9	7	252	910
Natchez, 15,276—Adams							
Natchez Charity Hospital	Gen	State	100	46	16	194	1,685
Natchez Sanatorium	Gen	NPAssn	50	23	11	246	1,997
New Albany, 3,692—Union							
Mayes Hospital	Gen	NPAssn	50	44	12	459	2,760
New Albany Hosp. and Clinic	Gen	NPAssn	15	6	3	36	348
Newton, 1,850—Newton							
Newton Hospital	Gen	NPAssn	25	15	6	250	1,177
Oxford, 3,455—Lafayette							
Bramlett Hospital	Gen	Indiv	45	21	10	84	1,020
Oxford Hospital	Gen	Indiv	32	24	5	222	1,450

Key to symbols and abbreviations is on page 1386

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MISSISSIPPI—Continued

Hospitals and Sanatoriums	Type of Service	Ownership or Control	Beds	Average Census †	Bassinets	Number of Births	Admissions †
Pascagoula, 5,908—Jackson							
Jackson County Hospital	Gen	County	83	35	25	875	2,879
Philadelphia, 3,711—Neshoba							
Choctaw Mississippi Indian Hospital	Gen	IA	35	15	7	65	570
Picayune, 5,129—Pearl River							
Martin Sanatorium	Gen	NPAssn	26	19	4	251	1,370
Pontotoc, 1,832—Pontotoc							
Pontotoc Clinic Hospital	Gen	Part	17	13	3	255	843
Poplarville, 1,661—Pearl River							
Poplarville Hospital	Gen	Indiv	25	6	4	182	997
Rosedale, 2,663—Bolivar							
Dr. Nobles' Clinic Hospital	Gen	Indiv	25	24	1	30	1,500
Rosedale-Bolivar County Hospital	Gen	City	17	6	4	44	325
Sanatorium, 200—Simpson							
Mississippi State Tuberculosis Sanatorium◆▲	TB	State	457	234	..	....	368
Starkville, 4,909—Oktibbeha							
J. W. Eckford Memorial Clinic-Hospital	Gen	Indiv	15	....	8	Estab. 1945	
State College, 309—Oktibbeha							
James Z. George Memorial Hospital	Inst	State	75	6	..	....	878
Tupelo, 8,233—Lee							
North Mississippi Community Hospital▲	Gen	NPAssn	49	48	10	635	3,253
Tylertown, 1,276—Walthal							
Pittman Hospital	Gen	NPAssn	28	19	8	260	1,700
Walthall Hospital	Gen	NPAssn	28	19	4	274	1,280
Union, 1,543—Newton							
Laird's Hospital	Gen	NPAssn	30	19	10	371	1,208
Vicksburg, 24,460—Warren							
Mercy Hospital-Street Memorial◆▲○	Gen	Church	125	93	17	467	4,225
Mississippi State Charity Hospital	Gen	State	65	45	10	134	1,620
Vicksburg Hospital◆▲○	Gen	NPAssn	90	75	12	300	2,565
Vicksburg Infirmary◆○	Gen	NPAssn	57	38	14	219	1,344
Water Valley, 3,340—Yalobusha							
Water Valley Hospital	Gen	Part	25	8	5	82	615
West Point, 5,627—Clay							
Flowers Hospital	Gen	Part	24	13	8	147	788
Whitfield, 340—Rankin							
Mississippi State Hospital▲	Ment	State	3,000	3,598	..	....	1,648
Winona, 2,533—Montgomery							
Winona Infirmary◆○	Gen	NPAssn	30	18	5	180	881
Yazoo City, 7,258—Yazoo							
Kings Daughters Hospital	Gen	NPAssn	30	19	12	274	1,692
Yazoo Clinic and Hospital	Gen	Part	30	10	2	3	566

Related Institutions

Bay St. Louis, 4,138—Hancock							
Kings Daughters and Sons Hospital	Gen	NPAssn	15	18	7	156	1,659
Ellisville, 2,607—Jones							
Ellisville State School	McDe	State	375	365	..	....	25
Greenville, 20,802—Washington							
Colored Kings Daughters Hospital	Gen	Indiv	65	55	2	30	1,033
Jackson, 62,107—Hinds							
Schmid Sanitarium	N&M	Corp	18	10	..	....	321
Z. T. Hubert Health Center of Jackson College	Gen	NPAssn	24	7	4	65	282

MISSOURI

Hospitals and Sanatoriums

Aurora, 4,056—Lawrence							
Aurora Hospital	Gen	City	20	11	5	230	817
Bethany, 2,682—Harrison							
Bethany Hospital and Clinic	Gen	Indiv	20	11	7	194	643
Bonne Terre, 3,720—St. Francois							
Bonne Terre Hospital	Gen	NPAssn	46	33	11	613	1,976
Boonville, 6,080—Cooper							
St. Joseph's Hospital◆○	Gen	Church	75	54	15	398	2,092
Butler, 2,958—Bates							
Butler Memorial Hospital	Gen	City	34	20	9	285	1,035
California, 2,525—Moniteau							
Latham Sanitarium	Gen	Indiv	33	15	9	145	902
Cape Girardeau, 19,426—Cape Girardeau							
St. Francis Hospital▲	Gen	Church	115	92	31	1,015	3,527
Southeast Missouri Hospital	Gen	NPAssn	65	72	20	622	2,079
Carthage, 10,585—Jasper							
McCune-Brooks Hospital	Gen	City	50	35	16	523	4,581
Cassville, 1,214—Barry							
Barry County Clinic and Hospital	Gen	Indiv	20	10	4	126	732
Clayton, 13,686—St. Louis							
St. Louis County Hosp.◆▲	Gen	County	236	150	32	567	3,226
Clinton, 6,041—Henry							
Clinton General Hospital	Gen	Corp	30	18	5	170	735
Columbia, 18,399—Boone							
Boone County General Hosp.▲	Gen	County	82	33	10	308	1,604
Ellis Fischel State Cancer Hospital◆○	Cancer	State	103	75	..	....	1,116
Noyes Hospital	Unit of University Hospitals						
Parker Memorial Hospital	Unit of University Hospitals						

MISSOURI—Continued

Hospitals and Sanatoriums	Type of Service	Ownership or Control	Beds	Average Census †	Bassinets	Number of Births	Admissions †
State Hospital for Crippled Children	Unit of University Hospitals						
University Hospitals◆▲	Gen	State	150	76	10	347	3,817
Excelsior Springs, 4,864—Clay							
Excelsior Springs Sanitarium and Hospital	Gen	NPAssn	40	25	10	257	804
Veterans Admin. Hospital◆▲	TB	Vet	252	278	..	....	633
Farmington, 3,753—St. Francois							
State Hospital No. 4▲	Ment	State	1,600	1,808	..	....	570
Fayette, 2,658—Howard							
Lee Hospital	Gen	Part	32	22	7	100	1,200
Fulton, 629—Callaway							
State Hospital No. 1◆▲	Ment	State	2,852	2,502	..	....	536
Hannibal, 20,865—Marion							
Levering Hospital▲	Gen	City	150	107	21	460	4,176
St. Elizabeth's Hospital▲	Gen	Church	100	81	20	645	3,924
Independence, 16,666—Jackson							
Independence Sanitarium and Hospital◆○	Gen	Church	141	99	36	1,061	4,662
Rural Jackson County Emergency Hospital	Gen	County	65	35	9	60	558
Ironton, 1,883—Iron							
Arcadia Valley Hospital	Gen	Church	28	28	12	330	1,380
Jefferson Barracks, 842—St. Louis							
Veterans Admin. Hospital◆▲	Gen	Vet	710	674	..	....	7,857
Jefferson City, 24,268—Cole							
Missouri State Penitentiary Hospital▲	Inst	State	200	55	..	....	1,069
St. Mary's Hospital	Gen	Church	100	98	24	927	4,066
Joplin, 37,344—Jasper							
Freeman Methodist Hospital	Gen	Church	80	77	20	606	2,852
St. John's Hospital◆	Gen	Church	150	105	26	887	4,781
Kansas City, 399,178—Jackson							
Children's Mercy Hospital◆▲○	Chil	NPAssn	145	134	..	....	2,102
Fairmount Maternity Hosp.	Mat	Corp	60	50	50	2122	350
Kansas City General Hospital No. 1◆▲○	Gen	City	550	384	50	7(3	9,583
Kansas City General Hospital No. 2▲○	Gen	City	202	178	24	689	3,722
Kansas City Municipal Tuberculosis Hospital◆▲	TB	City	232	187	..	....	351
Major Clinic and Hospital	N&M	Indiv	28	15	..	....	184
Menorah Hospital	Gen	NPAssn	100	145	26	702	5,028
Municipal Contagious Disease Hospital	Unit of Kansas City General Hospital No. 1						
Neurological Hospital▲	N&M	NPAssn	55	33	..	....	766
Ralph Sanitarium	Drug	Part	25	12	..	....	241
Research Hospital◆▲○	Gen	NPAssn	211	229	49	1,660	7,628
St. Joseph Hospital◆▲○	Gen	Church	310	190	42	2,229	12,163
St. Luke's Hospital◆▲○	Gen	Church	375	280	55	1,908	8,650
St. Mary's Hospital◆▲○	Gen	Church	170	160	40	1,149	6,417
St. Vincent's Hospital▲	Mat	Church	50	19	20	602	798
Trinity Lutheran Hospital◆▲○	Gen	Church	120	102	25	1,220	4,571
Wheatley-Provident Hosp.▲	Gen	NPAssn	67	23	5	73	878
Willows Maternity Sanitarium	Mat	Corp	120	72	55	300	245
Kennett, 6,353—Dunklin							
Presnell Hospital	Gen	Part	45	31	18	383	2,377
Kirksville, 10,680—Adair							
Grim-Smith Memorial Hosp.	Gen	Corp	52	41	15	341	1,975
Stickler Hospital	Gen	Corp	25	11	6	33	259
Kirkwood, 12,187—St. Louis							
Oakland Park Hospital	N&M	Corp	15	6	..	....	9
U. S. Marine Hospital▲	Gen	USPHS	103	107	..	....	1,452
Koch, 900—St. Louis							
Robert Koch Hospital◆▲○	TB	City	650	462	..	....	429
Lebanon, 3,025—Laclede							
Louise G. Wallace Hospital	Gen	NPAssn	57	35	20	469	2,043
Louisiana, 4,661—Pike							
Pike County Hospital	Gen	County	50	40	10	341	1,669
Marceline, 3,206—Linn							
St. Francis Hospital	Gen	Church	17	7	8	78	558
Marshall, 8,553—Saline							
Georgia Brown Blosser Home for Crippled Children	Orth	NPAssn	30	16	..	....	107
John Fitzgibbon Memorial Hospital	Gen	NPAssn	37	29	9	306	1,487
Maryville, 5,700—Nodaway							
St. Francis Hospital▲	Gen	Church	100	76	18	730	3,450
Mexico, 9,055—Audrain							
Audrain Hospital▲	Gen	County	56	55	14	578	2,493
Moberly, 12,920—Randolph							
Wabash Employes' Hospital▲	Indus	NPAssn	36	20	..	....	700
Woodland Hospital	Gen	Corp	40	29	10	256	1,249
Monett, 4,205—Barry							
St. Vincent Hospital	Gen	Church	30	20	8	256	809
Mount Vernon, 1,982—Lawrence							
Missouri State Sanatorium◆	TB	State	650	544	..	....	695
Neosho, 5,218—Newton							
Sale Memorial Hospital	Gen	Indiv	40	21	19	302	1,692
Nevada, 8,181—Vernon							
Nevada City Hospital	Gen	City	35	23	7	418	1,431
State Hospital No. 5▲	Ment	State	2,200	2,100	..	....	335
Ozark, 951—Christian							
Hagewood Hospital	Gen	Indiv	15	....	5	Estab. 1947	
Poplar Bluff, 11,163—Butler							
Brandon Hospital	Gen	Indiv	40	10	4	52	501
Lucy Lee Hospital	Gen	Indiv	63	46	14	450	2,976
Poplar Bluff Hospital	Gen	Indiv	75	66	18	488	3,471
Princeton, 1,384—Mercer							
Lambert Hospital	Gen	Indiv	10	....	4	Estab. 1947	
Robertson, 350—St. Louis							
Jewish Sanatorium	Chr	NPAssn	81	66	..	....	62

Key to symbols and abbreviations is on page 1396

MISSOURI—Continued

Hospitals and Sanatoriums	Type of Service	Ownership or Control	Beds	Average Census †	Bassinets	Number of Births	Admissions †
Rolla, 5,141—Phelps							
Missouri Trachoma Hospital	Trach	State	65	45	..	...	443
St. Charles, 10,802—St. Charles							
St. Joseph's Hospital♣	Gen	Church	90	70	20	705	3,073
St. Joseph, 75,711—Buchanan							
Missouri Method'st Hosp♣♣	Gen	Church	225	165	25	807	6,876
St. Joseph's Hospital♣♣	Gen	Church	140	113	36	1,136	5,004
State Hospital No. 2♣♣	Ment	State	2,674	2,492	..	...	350
St. Louis, 816,048—St. Louis City							
Alexian Brothers Hosp.♣♣	Gen	Church	175	148	..	...	2,739
Barnard Free Skin and Cancer Hospital♣♣	St Cancer	NPAssn	42	27	..	...	722
Barnes Hospital♣♣♣	Gen	Church	585	495	..	...	15,018
Bethesda General Hosp.♣	Gen	NPAssn	100	65	20	541	1,854
Christian Hospital♣♣	Gen	NPAssn	125	97	35	1,125	3,609
De Paul Hospital♣♣♣	Gen	Church	275	250	64	3,046	9,091
Evangelical Deaconess Hospital♣♣	Gen	Church	250	224	40	1,352	11,080
Faith Hospital	Gen	NPAssn	35	24	12	200	1,182
Firmin Desloge Hosp.♣♣♣	Unit of St. Mary's Group of Hospitals						
Prisco Employes Hospital♣	Indus	NPAssn	20	18	..	...	2,073
Homer G. Phillips Hosp.♣♣♣	Gen	City	604	551	73	2,652	12,417
Jewish Hospital♣♣♣	Gen	NPAssn	298	279	42	1,280	6,547
Josephine Heithkamp Memorial Hospital♣	Gen	Church	45	42	20	714	2,163
Lutheran Hospital♣♣♣	Gen	Church	165	156	40	1,373	6,081
McMillan Hospital♣	Unit of Barnes Hospital						
Midwestern Medical Center	Ven	USPHS	142	105	..	...	3,945
Missouri Baptist Hosp.♣♣♣	Gen	Church	450	378	50	1,210	11,859
Missouri Pacific Hospital♣♣	Indus	NPAssn	225	211	..	...	6,944
Mount St. Rose Sanat.♣♣	Unit of St. Mary's Group of Hospitals						
Park Lane Memorial Hosp.	Gen	NPAssn	125	99	30	520	2,924
Peoples Hospital♣	Gen	NPAssn	83	65	20	226	1,746
St. Ann's Maternity Hospital	Mat	Church	27	3	34	77	78
St. Anthony's Hospital♣♣♣	Gen	Church	256	215	60	2,508	7,700
St. John's Hospital♣♣♣	Gen	Church	347	294	74	2,010	9,376
St. Louis Children's Hosp.♣♣	Chil	NPAssn	120	103	..	...	2,235
St. Louis City Hospital♣♣♣	Gen	City	1,059	856	66	856	17,608
St. Louis City Sanitarium♣♣	Ment	City	3,500	3,406	..	...	578
St. Louis Maternity Hospital♣♣	Mat	NPAssn	135	111	125	2,898	4,437
St. Luke's Hospital♣♣♣	Gen	Church	184	163	36	1,064	5,219
St. Mary's Group of Hospitals♣♣♣	Gen Tb	Church	673	709	78	3,963	15,720
St. Mary's Hospital♣♣♣	Unit of St. Mary's Group of Hospitals						
St. Mary's Infirmary♣♣	Gen	Church	146	121	33	1,006	3,794
St. Vincent's Sanitarium♣♣	N&M	Church	250	226	..	...	356
Shriners Hospital for Crippled Children♣♣	Orth	NPAssn	120	80	..	...	405
Sedalia, 20,428—Pettis							
John H. Bothwell Memorial Hospital♣	Gen	City	93	70	23	678	2,966
Sikeston, 7,944—Scott							
Sikeston General Hospital	Gen	NPAssn	24	20	11	570	989
Smithville, 722—Clay							
Smithville Community Hosp.	Gen	NPAssn	24	11	10	104	611
Springfield, 61,238—Greene							
Burge Hospital♣	Gen	Church	85	75	36	1,029	4,824
City Hospital	Gen	City	20	11	6	126	877
Medical Center for Federal Prisoners♣	Inst	Fed	1,192	877	..	...	791
St. John's Hospital♣	Gen	Church	140	125	30	1,424	5,880
Springfield Baptist Hosp.♣	Gen	NPAssn	100	92	14	542	3,607
Veterans Admin. Hospital	TB	Vet	500	...	..	Estab.	1947
Trenton, 7,506—Grundy							
Cullers Hospital	Gen	Indiv	25	15	7	150	768
Wright Memorial Hospital	Gen	NPAssn	21	13	6	157	830
Warrensburg, 5,868—Johnson							
Warrensburg Clinic and Hosp.	Gen	Corp	30	25	6	291	1,268
Washington, 6,756—Franklin							
St. Francis Hospital	Gen	Church	58	42	15	754	3,580
Waynesville, 468—Pulaski							
Waynesville General Hospital	Gen	State	46	41	13	403	1,629
Webb City, 7,803—Jasper							
Jasper County Tuberculosis Hospital	TB	County	110	65	..	...	160
Webster Groves, 16,364—St. Louis							
Glenwood Sanatorium	N&M	Corp	65	61	..	...	168
West Plains, 4,066—Howell							
Christa Hogan Hospital	Gen	Indiv	18	12	9	225	510
Related Institutions							
Humansville, 786—Polk							
George Dimmitt Memorial Hospital	Gen	NPAssn	19	8	7	94	416
Independence, 10,666—Jackson							
Vaile Sanitarium	N&M	Indiv	23	10	..	...	10
Kansas City, 399,178—Jackson							
Florence Crittenton Home	Mat	NPAssn	15	21	24	38	51
Florence Home for Colored Girls	Mat	NPAssn	48	14	8	40	48
Trowbridge Training School for Nervous and Backward Children	McDe	Indiv	35	30	..	...	36
Liberty, 3,508—Clay							
Missouri Odd Fellows Home Hospital	Inst	NPAssn	50	32	..	...	406
Marshall, 8,333—Saline							
Missouri State School	McDe	State	1,845	1,674	..	...	171
Marthasville, 321—Warren							
Evangelical Emmaus Home for Epileptics and Feebleminded	McDe	Church	100	80	..	...	5

MISSOURI—Continued

Related Institutions	Type of Service	Ownership or Control	Beds	Average Census †	Bassinets	Number of Births	Admissions †
Mountain Grove, 2,431—Wright							
Ryan Hospital	Gen	Indiv	10	No data supplied			
Rolla, 5,141—Phelps							
Missouri School of Mines Hospital	Inst	State	21	1	..	...	289
St. Charles, 10,802—St. Charles							
Evangelical Emmaus Home for Epileptics and Feebleminded	McDe	Church	150	144	..	...	14
St. James, 1,812—Phelps							
State Federal Soldiers Home Hospital	Inst	State	50	32	..	...	123
St. Louis, 816,048—St. Louis City							
Booth Memorial Hospital	Mat	Church	60	39	40	545	656
City Infirmary Hospital	Inst Chr	City	1,508	1,334	..	...	621
Hospital of Masonic Home	Inst	NPAssn	121	59	..	...	261
Mother of Good Counsel Home and Hospital	Conv	Church	74	74	..	...	77
St. Louis Training School	McDe	City	525	416	..	...	56
Valley Park, 2,091—St. Louis							
Ridge Farm	Unit of St. Louis Children's Hospital						
Webster Groves, 16,364—St. Louis							
Rose Dry Miriam Convalescent Home	Conv	NPAssn	37	24	..	...	261

MONTANA

Hospitals and Sanatoriums	Type of Service	Ownership or Control	Beds	Average Census †	Bassinets	Number of Births	Admissions †
Anaconda, 11,604—Deer Lodge							
St. Ann's Hospital♣	Gen	Church	75	59	15	832	2,123
Billings, 23,261—Yellowstone							
Billings Deaconess Hospital♣	Gen	Church	78	74	25	842	3,448
St. Vincent Hospital♣	Gen Orth	Church	185	170	29	1,034	6,327
Bozeman, 8,655—Gallatin							
Bozeman Deaconess Hosp.	Gen	Church	54	40	12	601	2,603
Browning, 1,925—Glacier							
Blackfeet Indian Hospital	Gen	IA	45	30	8	142	1,098
Butte, 37,081—Silver Bow							
Murray Hospital♣♣	Gen	Corp	100	81	20	374	2,912
St. James Hospital♣♣	Gen	Church	160	110	30	809	4,301
Silver Bow County Hosp.	Inst Gen	County	125	83	9	9	372
Choteau, 1,181—Teton							
Choteau Hospital	Gen	Indiv	17	9	4	20	187
Conrad, 1,471—Pondera							
St. Mary's Hospital	Gen	Church	58	33	10	206	1,431
Crow Agency, 800—Big Horn							
Crow Indian Hospital	Gen	IA	36	20	4	99	940
Deer Lodge, 3,278—Powell							
Montana State Tuberculosis Sanitarium♣	TB	St'ate	250	216	..	...	221
St. Joseph Hospital	Gen	Church	25	20	10	132	606
Forsyth, 1,686—Rosebud							
Rosebud Community Hosp.	Gen	Church	26	13	6	120	499
Fort Benton, 1,227—Chouteau							
St. Clare Hospital	Gen	Church	40	20	6	61	409
Fort Harrison, 500—Lewis and Clark							
Veterans Admin. Hospital	Gen	Vet	294	190	..	...	2,313
Glasgow, 3,750—Valley							
Frances Mahon Deaconess Hospital	Gen	Church	40	38	15	320	1,640
Glendive, 4,324—Dawson							
Glendive General Hospital	Gen	County	30	21	5	62	244
Northern Pacific Hospital	Gen	NPAssn	57	42	12	259	2,197
Great Falls, 29,928—Cascade							
Columbus Hospital♣	Gen	Church	215	182	50	804	6,370
Montana Deaconess Hospital♣♣	Gen	Church	200	161	46	741	6,976
Hamilton, 2,335—Ravalli							
Marcus Daly Memorial Hosp.	Gen	NPAssn	40	30	12	284	1,327
Harlem, 1,196—Blaine							
Fort Belknap Indian Hospital and Sanatorium	Gen	IA	47	16	8	65	674
Havre, 6,427—Hill							
Kennedy Deaconess Hospital♣	Gen	Church	60	36	14	250	2,133
Sacred Heart Hospital♣	Gen	Church	125	68	19	370	3,091
Helena, 15,056—Lewis and Clark							
St. John Hospital♣	Gen	Church	85	66	20	353	2,922
St. Peter's Hospital♣	Gen	NPAssn	60	44	18	298	1,302
Shodair Crippled Children's Hospital♣	Orth	NPAssn	24	20	17	...	304
Jordan, 500—Garfield							
Good Samaritan Hospital	Gen	Church	18	14	4	75	169
Kalispell, 8,245—Flathead							
Kalispell General Hospital♣	Gen	Church	54	51	16	629	2,503
Lewiston, 5,874—Fergus							
St. Joseph's Hospital♣	Gen	Church	120	82	18	421	4,584
Libby, 1,837—Lincoln							
St. John Lutheran Hospital	Gen	Church	20	12	5	110	205
Livingston, 6,642—Park							
Park Hospital	Gen	Indiv	28	19	6	98	785
Miles City, 7,313—Custer							
Miles City Hospital (Holy Rosary Hospital)♣	Gen	Church	135	122	15	484	5,220
Missoula, 18,440—Missoula							
Memorial Hospital	Gen	NPAssn	35	...	12	Estab.	1947
Northern Pacific Hospital	Indus	NPAssn	65	40	..	...	2,128
St. Patrick Hospital♣	Gen	Church	128	137	32	611	5,145
Plentywood, 1,574—Sheridan							
Sheridan Memorial Hospital	Gen	NPAssn	18	13	6	124	585

Key to symbols and abbreviations is on page 1386

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MONTANA—Continued

Hospitals and Sanatoriums	Type of Service	Ownership or Control	Beds	Average Census †	Bassinets	Number of Births	Admissions †
Poplar, 1,442—Roosevelt							
Fort Peck Indian Agency Hospital	Gen	IA	23	9	7	85	1,084
Roundup, 2,644—Musselshell							
Musselshell Valley Hospital	Gen	Indiv	20	10	4	60	730
St. Ignatius, 768—Lake							
Holy Family Hospital	Gen	Church	50	21	6	160	1,307
Terry, 1,082—Prairie							
Lutheran Good Samaritan Hospital	Gen	Church	15	6	5	47	221
Townsend, 1,330—Broadwater							
Broadwater Hospital	Gen	Corp	26	15	6	122	834
Warmsprings, 1,500—Deer Lodge							
Montana State Hospital[9]	Ment	State	1,650	1,653	..	...	220
Wolf Point, 1,980—Roosevelt							
Lutheran Trinity Hospital	Gen	NPAssn	18	15	8	193	600
Related Institutions							
Columbus, 962—Stillwater							
Stillwater Community Hosp.	Gen	Church	18	11	4	77	635
Great Falls, 29,578—Cascade							
City-County Isolation Hosp.	Iso	CyCo	25	8	..	...	300
Hardin, 1,886—Big Horn							
Big Horn County Community Hospital	Gen	NPAssn	24	...	4	...	...
Helena, 15,056—Lewis and Clark							
Lewis and Clark County Hospital	InstGen	County	100	61	3	...	146
Polson, 2,156—Lake							
Hotel Dieu Hospital	Gen	Church	20	18	7	181	585
Scobey, 1,311—Daniels							
Scobey Clinic Hospital	Gen	Indiv	15	10	4	40	196

NEBRASKA

Hospitals and Sanatoriums	Type of Service	Ownership or Control	Beds	Average Census †	Bassinets	Number of Births	Admissions †
Ainsworth, 1,835—Brown							
Ainsworth Clinic and Hosp.	Gen	Part	28	15	5	199	1,107
Alliance, 6,253—Box Butte							
St. Joseph's Hospital[A◇]	Gen	Church	114	75	22	431	2,663
Auburn, 3,629—Nemaha							
Auburn Hospital	Gen	Indiv	16	9	6	148	500
Tushia General Hospital	Gen	Indiv	15	6	3	72	314
Aurora, 2,419—Hamilton							
Aurora Hospital	Gen	Part	28	14	10	123	552
Bassett, 851—Rock							
Bassett Hospital	Gen	Part	26	9	9	72	415
Beatrice, 10,883—Gage							
Lutheran Hospital	Gen	Church	85	64	21	478	1,984
Mennonite Deaconess Home and Hospital	Gen	Church	32	29	10	178	939
Benkelman, 1,448—Dundy							
Morehouse Hospital	Gen	Indiv	10	8	4	73	577
Blair, 2,992—Washington							
Blair Hospital	Gen	Indiv	14	9	3	178	569
Broken Bow, 2,956—Custer							
Broken Bow Hospital	Gen	Indiv	35	26	7	...	978
Cambridge, 1,084—Furnas							
Republican Valley Hospital	Gen	Indiv	18	11	5	36	275
Chadron, 4,262—Dawes							
Chadron Municipal Hospital	Gen	City	25	13	8	138	573
Columbus, 7,632—Platte							
Lutheran Hospital	Gen	Church	30	17	7	271	902
St. Mary's Hospital[A]	Gen	Church	153	65	15	645	3,267
Dalton, 358—Cheyenne							
Pioneer Memorial Hospital	Gen	Indiv	15	10	5	73	376
David City, 2,272—Butler							
David City Hospital	Gen	NPAssn	25	12	8	194	772
Fairbury, 6,304—Jefferson							
Fairbury Hospital	Gen	Indiv	40	28	12	270	987
Falls City, 6,148—Richardson							
Our Lady of Perpetual Help Hospital	Gen	Church	27	22	8	250	981
Fort Crook, —Sarpy							
Station Hospital	Gen	Army	81	40	7	61	1,385
Fremont, 11,862—Dodge							
Dodge County Hospital	Gen	County	85	43	18	629	2,066
Friend, 1,162—Saline							
Warren Memorial Hospital	Gen	City	32	30	6	139	241
Genoa, 1,231—Nance							
Emergency Hospital	Gen	Indiv	9	3	3	56	184
Genoa Hospital	Gen	Indiv	11	6	3	61	221
Gordon, 1,867—Sheridan							
City Hospital	Gen	Indiv	9	4	6	28	164
Grand Island, 19,130—Hall							
Grand Island Lutheran Hosp.	Gen	Church	40	27	14	364	1,510
St. Francis Hospital[A◇]	Gen	Church	141	119	24	508	4,647
Hastings, 15,145—Adams							
Mary Lanning Memorial Hospital[A◇]	Gen	NPAssn	138	88	25	960	3,515
Holdrege, 3,369—Phelps							
Brewster Hospital	Gen	Corp	60	35	15	367	1,760
Holdrege Hospital	Gen	Indiv	22	15	5	92	702
Humboldt, 1,356—Richardson							
Humboldt Hospital	Gen	Indiv	17	13	7	127	600
Imperial, 1,105—Chase							
Imperial Community Hospital	Gen	Corp	18	6	5	213	765
Ingleside, 1,609—Adams							
Hastings State Hospital[9◇]	Ment	State	1,700	1,688	..	...	379

NEBRASKA—Continued

Hospitals and Sanatoriums	Type of Service	Ownership or Control	Beds	Average Census †	Bassinets	Number of Births	Admissions †
Kearney, 9,643—Buffalo							
Good Samaritan Hospital[A]	Gen	Church	68	44	20	564	2,711
Nebraska Hospital for the Tuberculous[A]	TB	State	200	147	..	...	884
Lewellen, 532—Garden							
Lewellen Community Hospital	Gen	NPAssn	16	8	4	108	647
Lexington, 5,686—Dawson							
Lexington Community Hosp.	Gen	NPAssn	24	6	10	312	916
Lincoln, 81,984—Lancaster							
Bryan Memorial Hospital[A◇]	Gen	Church	110	98	20	602	3,467
Dr. Benj. F. Bailey Sanat.	N & M	Corp	115	111	..	...	336
Lincoln General Hospital[A◇]	Gen	NPAssn	193	188	40	1,261	6,697
Lincoln State Hospital[A]	Ment	State	1,500	1,489	..	...	274
Nebraska Orthopedic Hosp.[A]	Orth	State	110	79	..	...	952
St. Elizabeth Hospital[A◇]	Gen	Church	220	182	60	1,278	7,700
Veterans Admin. Hospital[A]	Gen	Vet	306	290	..	...	3,357
Loup City, 1,675—Sherman							
Sacred Heart Hospital	Gen	Church	27	16	10	204	745
Lynch, 487—Boyd							
Sacred Heart Hospital	Gen	Church	24	15	8	150	590
McCook, 6,212—Red Willow							
St. Catherine of Sienna Hospital[A]	Gen	Church	50	41	16	439	2,593
Nebraska City, 7,329—Otoe							
St. Mary's Hospital[A]	Gen	Church	60	32	15	416	1,884
Norfolk, 10,490—Madison							
Lutheran Hospital	Gen	Church	60	47	20	565	2,483
Norfolk State Hospital[9◇]	Ment	State	1,120	1,161	..	...	144
Our Lady of Lourdes Hosp.	Gen	Church	34	31	12	321	1,187
North Platte, 12,429—Lincoln							
North Platte Memorial Hosp.	Gen	NPAssn	32	18	10	158	915
St. Mary Hospital[A]	Gen	Church	62	47	17	423	2,086
Oakland, 1,280—Burt							
Oakland Community Hosp.	Gen	Part	13	7	5	130	502
Odell, 404—Gage							
Odell General Hospital	Gen	Indiv	11	7	5	85	382
Ogallala, 3,150—Keith							
Ogallala Hospital	Gen	Indiv	16	8	7	121	460
Omaha, 223,844—Douglas							
Bishop Clarkson Memorial Hospital[A◇]	Gen	Church	160	102	17	602	6,234
Children's Memorial Hosp.[6]	Chil	NPAssn	100	...	12	Estab. 1947	
Creighton Memorial St. Joseph's Hospital[A◇]	Gen	Church	457	408	77	2,314	12,361
Doctors Hospital	Gen	NPAssn	103	89	16	392	7,013
Douglas County Hospital[A◇]	Genlso	County	304	281	..	...	2,391
Douglas County Psychiatric Hospital	Unit of Douglas County Hospital						
Immanuel Deaconess Institute[A◇]	Gen	Church	128	126	40	1,249	4,483
Lutheran Hospital[A◇]	Gen	Church	130	108	16	382	3,650
Nebraska Methodist Hospital[A◇]	Gen	Church	167	146	24	1,073	6,532
St. Catherine's Hospital[A◇]	Gen	Church	167	152	36	934	5,852
University of Nebraska Hospital[A◇]	Gen	State	197	172	15	422	2,895
Ord, 2,240—Valley							
Ord Hospital	Gen	Indiv	20	10	4	56	303
Osmond, 706—Pierce							
St. Joseph Hospital	Gen	Church	18	9	10	160	478
Pawnee City, 1,647—Pawnee							
Pawnee County Hospital	Gen	County	30	7	8	84	357
Pender, 1,135—Thurston							
Logan Valley Hospital	Gen	Part	13	7	6	82	383
Scottsbluff, 12,867—Scotts Bluff							
St. Mary Hospital	Gen	Church	41	31	15	457	2,833
West Nebraska Methodist Hospital[9]	Gen	Church	75	75	20	722	4,491
Seward, 2,805—Seward							
Seward Hospital	Gen	Indiv	30	7	8	126	323
Sidney, 5,208—Cheyenne							
Roche Hospital	Gen	Part	18	14	4	62	564
Station Hospital	Gen	Army	25	2	6	25	127
Taylor Hospital	Gen	Part	20	14	10	278	1,172
Stratton, 630—Hitchcock							
Dr. Stewart's Private Hosp.	Gen	Indiv	12	4	3	44	1,024
Stromsburg, 1,127—Polk							
Stromsburg Hospital	Gen	Indiv	20	10	8	122	536
Stuart, 769—Holt							
Clark Hospital	Gen	Indiv	17	12	4	47	251
Superior, 2,620—Nuckolls							
Brodstone Memorial Hospital	Gen	NPAssn	18	13	8	178	683
Tecumseh, 2,104—Johnson							
Tecumseh Hospital	Gen	Indiv	13	8	8	126	412
Valentine, 2,108—Cherry							
General Hospital	Gen	Indiv	22	15	7	219	1,173
Wahoo, 2,648—Saunders							
Wahoo Community Hospital	Gen	Part	20	12	10	167	640
Wayne, 2,719—Wayne							
Bentback Hospital	Gen	Indiv	20	10	8	220	637
Winnebago, 608—Thurston							
Winnebago Indian Hospital	Gen	IA	54	29	9	92	762
York, 5,393—York							
York General Hospital	Gen	NPAssn	46	36	12	418	1,742
Related Institutions							
Beatrice, 10,883—Gage							
Beatrice State Home	MeDe	State	1,540	1,540	..	...	60
Lincoln, 81,984—Lancaster							
Nebraska State Penitentiary Hospital	Inst	State	30	8	..	...	528

Key to symbols and abbreviations is on page 1396

NEBRASKA—Continued

Related Institutions	Type of Service	Ownership or Control	Beds	Average Census †	Bassinets	Number of Births	Admissions †
Milford, 759—Seward							
Nebraska Industrial Home	Inst	State	18	3	12	59	59
Omaha, 257,544—Douglas							
Bramwell Booth Convalescent Hospital	Conv	Church	54	50	..	...	100
Hattie B. Munroe Home for Convalescent Crippled Children	Orth	NPAssn	50	26	..	...	75
Dr. M. L. Rich Memorial Hospital	N&M	Indiv	15	...	..	Estab. 1947	
Salvation Army Booth Memorial Hospital	Mat	Church	45	48	25	187	192
Orchard, 495—Antelope							
Orchard Hospital	Gen	Indiv	10	1	3	30	109
Oshkosh, 910—Garden							
Oshkosh Hospital	Gen	City	10	8	3	86	556
Plainview, 1,411—Pierce							
Plainview General Hospital	Gen	Corp	10	5	5	88	431
Sutherland, 862—Lincoln							
Sutherland Hospital	Gen	NPAssn	18	12	8	110	545
Wahhill, 1,204—Thurston							
Dr. Picotte Memorial Hosp.	Gen	Part	12	7	2	14	52
Westpoint, 2,510—Cuming							
St. Joseph Home and Hosp.	Gen	Church	23	19	6	254	840

NEVADA

Hospitals and Sanatoriums

Boulder City, 3,000—Clark							
Boulder City Hospital	Gen	USPHS	23	11	6	166	855
Caliente, 1,000—Lincoln							
Lincoln County Hospital	Gen	County	27	12	7	79	564
East Ely, 750—White Pine							
Steptoe Valley Hospital♣	Gen	NPAssn	40	15	7	150	670
Elko, 4,094—Elko							
Elko General Hospital♣	Gen	County	50	23	12	206	958
Henderson, 6,500—Clark							
Rose de Lima Hospital	Gen	Church	57	23	12	200	1,064
Las Vegas, 8,422—Clark							
Las Vegas Hospital	Gen	Part	55	30	12	245	1,502
Owyhee, 100—Elko							
Western Shoshone Hospital	Gen	IA	25	11	4	30	421
Reno, 21,317—Washoe							
Nevada State Hospital for Mental Diseases	Ment	State	375	350	..	...	137
St. Mary's Hospital♣	Gen	Church	75	73	30	676	3,484
Veterans Admin. Center♣	Gen	Vet	33	29	..	...	822
Washoe County General Hosp.	Gen	County	255	228	18	600	5,242
Schurz, 100—Mineral							
Walker River Indian Hosp.	Gen	IA	30	22	10	77	573
Winnemucca, 2,485—Humboldt							
Humboldt County General Hospital	Gen	County	63	26	14	140	1,220

Related Institutions

Pioche, 1,325—Lincoln							
Pioche Hospital	Gen	Indiv	18	5	4	55	547

NEW HAMPSHIRE

Hospitals and Sanatoriums

Berlin, 19,084—Coos							
St. Louis Hospital♣◇	Gen	Church	91	69	14	390	2,400
Claremont, 12,144—Sullivan							
Claremont General Hospital♣	Gen	NPAssn	59	38	20	291	1,614
Concord, 27,171—Merrimack							
Concord Hospital♣◇	Gen	NPAssn	102	136	22	944	4,983
Margaret Pillsbury General Hospital	Unit of Concord Hospital						
New Hampshire Memorial Hospital	Unit of Concord Hospital						
New Hampshire State Hospital♣◆◇	Ment	State	2,327	2,405	..	...	917
Pembroke, Sanatorium	TB	Corp	100	38	..	...	68
Dover, 14,990—Strafford							
Wentworth Hospital♣◇	Gen	City	69	49	15	484	2,978
East Derry,—Rockingham							
Alexander Eastman Hospital	Gen	NPAssn	20	18	6	184	564
Epping, 1,674—Rockingham							
Rockingham County Home and Hospital	Gen	County	55	10	12	5	114
Exeter, 5,388—Rockingham							
Exeter Hospital♣	Gen	NPAssn	76	47	22	625	2,402
Franklin, 6,749—Merrimack							
Franklin Hospital♣	Gen	NPAssn	50	29	15	273	1,460
Glencliff, 300—Grafton							
New Hampshire State Sanat.♣	TB	State	88	80	..	...	78
Grasmere, 300—Hillsboro							
Hillsborough County General Hospital◇	Gen	County	92	52	18	193	1,955
Hanover, 3,425—Grafton							
Mary Hitchcock Memorial Hospital◆◆◇	Gen	NPAssn	178	173	18	602	5,091
Keene, 15,852—Cheshire							
Elliot Community Hospital◇	Gen	NPAssn	59	62	20	309	2,697
Laconia, 13,484—Belknap							
Laconia Hospital◇	Gen	NPAssn	96	102	25	525	3,550

NEW HAMPSHIRE—Continued

Hospitals and Sanatoriums	Type of Service	Ownership or Control	Beds	Average Census †	Bassinets	Number of Births	Admissions †
Lancaster, 3,095—Coos							
Lancaster Hospital	Gen	NPAssn	22	17	8	204	737
Lebanon, 7,500—Grafton							
Alice Peck Day Memorial Hospital	Gen	NPAssn	30	14	12	330	708
Littleton, 4,571—Grafton							
Littleton Hospital	Gen	NPAssn	50	19	10	201	837
Manchester, 77,685—Hillsboro							
Balch Hospital	Unit of Elliot Hospital						
Elliot Hospital◆◇	Gen	NPAssn	127	117	32	1,239	3,852
Notre Dame de Lourdes Hospital◇	Gen	Church	100	87	20	615	3,128
Our Lady of Perpetual Help Maternity Hospital	Unit of Sacred Heart Hospital						
Sacred Heart Hospital◆◇	Gen	Church	150	125	24	447	6,195
Nashua, 32,927—Hillsboro							
Nashua Memorial Hospital♣◇	Gen	NPAssn	84	78	16	719	2,432
St. Joseph's Hospital♣◇	Gen	Church	120	83	18	669	3,132
New London, 1,629—Merrimack							
New London Hospital	Gen	NPAssn	23	15	6	76	612
Newport, 5,304—Sullivan							
Carrie F. Wright Hospital	Gen	NPAssn	25	15	10	158	585
North Conway, 900—Carroll							
Memorial Hospital	Gen	NPAssn	37	30	12	260	1,042
Peterborough, 2,470—Hillsboro							
Monadnock Community Hospital♣	Gen	NPAssn	36	27	9	285	1,453
Plymouth, 2,533—Grafton							
Sewa Speare Memorial Hosp.	Gen	NPAssn	35	24	8	230	1,034
Portsmouth, 14,820—Rockingham							
Portsmouth Hospital♣	Gen	NPAssn	101	62	28	808	3,116
U. S. Naval Hospital♣	Gen	Navy	150	107	10	128	1,749
Rochester, 12,012—Strafford							
Frisbie Memorial Hospital♣	Gen	NPAssn	60	51	20	851	3,200
West Stewartstown, 300—Coos							
Coos County Hospital	Gen	County	50	22	8	174	957
Whitefield, 1,834—Coos							
Morrison Hospital	Gen	NPAssn	56	16	9	64	327
Wolfeboro, 2,636—Carroll							
Huggins Hospital♣	Gen	NPAssn	36	29	8	177	1,174
Woodsville, 1,500—Grafton							
Cottage Hospital	Gen	NPAssn	24	20	10	190	1,141
Grafton County Hospital	InstGen	County	30	22	4	1	99

Related Institutions

Exeter, 5,388—Rockingham							
Lamont Infirmary	Inst	NPAssn	53	9	..	...	540
Laconia, 13,484—Belknap							
Laconia State School	McDe	State	720	723	..	...	62
Manchester, 77,685—Hillsboro							
Manchester Isolation Hosp.	Iso	City	61	23	..	...	265

NEW JERSEY

Hospitals and Sanatoriums

Allentown, 709—Monmouth							
Dr. Farmer's Private Hosp.	Gen	Indiv	41	30	11	107	801
Allenwood, 150—Monmouth							
Allenwood Sanatorium (Monmouth County Hospital for Tuberculosis)	TB	County	100	99	..	...	130
Atlantic City, 64,094—Atlantic							
Atlantic City Hospital◆◆◇	Gen	NPAssn	280	204	40	1,977	8,237
Children's Seashore House at Atlantic City for Invalid Children	Orth	NPAssn	146	80	..	...	208
Bayonne, 76,196—Hudson							
Bayonne Hospital and Dispensary◆◆◇	Gen	NPAssn	250	158	30	1,431	5,941
Swiney Sanatorium	Gen	Indiv	16	7	9	122	367
Beach Haven, 745—Ocean							
Seashore Branch of Babies' Hospital	Unit of Babies' Hospital, Philadelphia						
Bellemead, 51—Somerset							
Belle Mead Sanatorium	N&M	Corp	65	57	..	...	100
Belleville, 28,167—Essex							
Essex County Hospital for Contagious Diseases◆◇	Iso	County	360	94	..	...	2,581
Blackwood, 2,000—Camden							
Camden County General Hospital	Gen	County	250	158	..	...	845
Camden County Hospital for Mental Diseases	Ment	County	750	778	..	...	115
Camden County Tuberculosis Hospital	TB	County	220	138	..	...	300
Bound Brook, 7,616—Somerset							
Bound Brook Hospital♣	Gen	NPAssn	35	30	10	117	701
Bridgeton, 15,992—Cumberland							
Bridgeton Hospital	Gen	NPAssn	94	64	21	775	2,461
Ivy Hall Sanitarium	Conv	NPAssn	45	33	..	...	94
Browns Mills, 500—Burlington							
Deborah Sanatorium	TB	NPAssn	103	87	..	...	92
Camden, 117,536—Camden							
Camden General Hospital	Gen	NPAssn	30	24	14	692	1,376
Cooper Hospital◆◆◇	Gen	NPAssn	351	294	90	2,841	9,346
Municipal Hospital for Contagious Diseases	Iso	City	100	18	..	...	297
West Jersey Hospital◆◆◇	Gen	NPAssn	260	199	72	2,570	8,172

Key to symbols and abbreviations is on page 1396

NEW JERSEY—Continued

Hospitals and Sanatoriums	Type of Service	Ownership or Control	Beds	Average Census †	Number of Bassinets	Number of Births	Admissions †
Cedar Grove, 2,000—Essex							
Essex County Overbrook Hospital♦♣	Ment	County	2,636	2,506	..	...	823
Dover, 10,491—Morris							
Dover General Hospital♣	Gen	NPAssn	110	73	25	797	3,139
East Orange, 68,945—Essex							
East Orange General Hosp.♣♣	Gen	NPAssn	120	87	30	1,116	3,438
Elizabeth, 109,912—Union							
Alexian Brothers Hospital♣♣	Gen	Church	150	130	..	...	2,706
Elizabeth General Hospital and Dispensary♣♣	Gen	NPAssn	197	145	40	1,791	5,793
St. Elizabeth Hospital♣♣	Gen	Church	226	148	44	2,025	5,541
Englewood, 18,666—Bergen							
Englewood Hospital♣♣	Gen	NPAssn	190	144	48	1,848	5,915
Fort Dix, 1,600—Burlington							
Tilton General Hospital♣	Gen	Army	3,707	3,471	10	207	21,634
Fort Monmouth,—Monmouth							
Station Hospital♣	Gen	Army	300	214	13	214	6,127
Franklin, 4,629—Sussex							
Franklin Hospital♣	Gen	NPAssn	37	25	7	306	1,150
Glen Gardner, 526—Hunterdon							
New Jersey Sanatorium for Tuberculous Diseases♣	TB	State	387	303	..	...	276
Greystone Park,—Morris							
New Jersey State Hosp.♣♣	Ment	State	5,722	5,736	..	...	1,154
Hackensack, 30,270—Bergen							
Hackensack Hospital♣♣	Gen	NPAssn	250	224	50	2,313	10,287
Hasbrouck Heights, 6,716—Bergen							
Hasbrouck Heights Hospital♣	Orth	NPAssn	37	24	..	...	772
Hoboken, 50,115—Hudson							
St. Mary's Hospital♣♣	Gen	Church	420	277	30	1,148	7,059
Irvington, 55,398—Essex							
Irvington General Hospital♣♣	Gen	City	115	78	20	820	3,654
Jersey City, 301,173—Hudson							
Berthold S. Pollack Hospital for Chest Diseases♣♣	TB	County	447	294	..	...	731
Christ Hospital♣♣	Gen	Church	306	193	51	1,340	6,137
Fairmount Hospital	Gen	NPAssn	30	12	15	410	1,760
Greenville Hospital♣	Gen	NPAssn	60	59	16	214	916
Jersey City Hospital♣♣	Gen	City	1,500	925	..	...	21,474
Jersey City Hospital for Communicable Diseases	Unit of Jersey City Hospital						
Margaret Hague Maternity Hospital♣♣	Mat	County	345	281	365	9,695	11,775
Psychopathic Hospital	Unit of Jersey City Hospital						
St. Francis Hospital♣♣	Gen	Church	230	150	..	...	3,798
Kearny (Arlington P.O.), 29,467—Hudson							
West Hudson Hospital♣	Gen	NPAssn	62	45	20	664	2,633
Lakehurst, 827—Ocean							
U. S. Naval Air Station Dispensary	Gen	Navy	46	9	8	93	679
Lakewood, 5,005—Ocean							
Paul Kimball Hospital♣	Gen	NPAssn	66	65	14	445	2,418
Long Branch, 17,808—Monmouth							
Dr. E. C. Hazard Hospital	Gen	NPAssn	95	36	30	928	1,589
Monmouth Memorial Hospital♣♣	Gen	NPAssn	262	188	42	1,898	7,025
Lyons,—Somerset							
Veterans Admin. Hospital♣♣	Ment	Vet	2,497	2,350	..	...	2,164
Marlboro, 500—Monmouth							
New Jersey State Hospital♣	Ment	State	2,501	2,755	..	...	986
Metuchen, 6,557—Middlesex							
Roosevelt Hospital	TB	County	221	181	..	...	253
Millville, 14,866—Cumberland							
Millville Hospital	Gen	NPAssn	52	34	14	377	1,730
Montclair, 39,807—Essex							
Montclair Community Hosp.♣	Gen	NPAssn	56	41	20	537	1,561
Mountainside Hospital♣♣	Gen	NPAssn	300	207	59	1,779	6,761
St. Vincent's Hospital♣	Gen	Church	50	46	12	421	1,651
Morris Plains, 2,018—Morris							
Children's Heart Unit of Victoria Foundation	Card	NPAssn	24	21	..	...	30
Morristown, 15,276—Morris							
All Souls Hospital♣♣	Gen	Church	123	89	36	1,133	3,484
Aurora Institute	Conv	Corp	90	41	..	...	506
Morristown Memorial Hosp.♣♣	Gen	NPAssn	140	86	24	582	3,630
Shoophone Mountain San.	TB	County	76	53	..	...	65
Mount Holly, 6,573—Burlington							
Burlington County Hosp.♣♣	Gen	NPAssn	121	66	18	1,079	3,031
Neptune, 2,392—Monmouth							
Pitkin Memorial Hosp.♣♣	Gen	NPAssn	154	132	30	1,551	5,711
Newark, 429,760—Essex							
American Legion Memorial Hospital	Gen	NPAssn	35	23	15	345	1,154
Babies' Hospital-Coit Memorial♣	Chil	NPAssn	88	39	..	...	1,907
Columbus Hospital♣	Gen	NPAssn	75	61	35	1,161	3,650
Community Hospital♣	Gen	NPAssn	24	7	6	159	535
Hospital and Home for Crippled Children♣♣	Orth	NPAssn	95	48	..	...	418
Hospital of St. Barnabas and for Women and Children♣♣	Gen	Church	225	180	45	1,837	7,264
Lutheran Memorial Hosp.♣♣	Gen	NPAssn	121	97	21	671	3,037
Newark Beth Israel Hosp.♣♣	Gen	NPAssn	365	263	76	2,804	11,189
Newark City Hospital♣♣	Gen	City	700	602	40	1,374	12,014
Newark Eye and Ear Infirmary♣	ENT	NPAssn	65	38	..	...	2,841
Presbyterian Hospital♣♣	Gen	NPAssn	275	202	65	1,940	9,110
St. James Hospital♣♣	Gen	Church	125	97	21	803	3,350
St. Michael's Hospital♣♣	Gen	Church	350	340	70	2,661	11,509
New Brunswick, 33,180—Middlesex							
Middlesex General Hosp.♣	Gen	NPAssn	102	65	23	1,147	3,422
St. Peter's General Hospital♣	Gen	Church	191	102	56	1,845	6,404
Station Hospital	Gen	Army	900	551	20	156	15,134

NEW JERSEY—Continued

Hospitals and Sanatoriums	Type of Service	Ownership or Control	Beds	Average Census †	Number of Bassinets	Number of Births	Admissions †
New Lisbon, 213—Burlington							
Marcus W. Newcomb Hospital for Chest Disease♣	TB	County	112	83	..	...	78
Newton, 5,523—Sussex							
Newton Memorial Hosp.♣	Gen	NPAssn	42	48	9	633	1,872
Northfield, 2,818—Atlantic							
Atlantic County Hospital for Mental Diseases	Ment	County	475	326	..	...	171
Atlantic County Hospital for Tuberculous Diseases♣	TB	County	86	39	..	...	71
Orange, 35,717—Essex							
New Jersey Orthopaedic Hospital and Dispensary♣♣	Orth	NPAssn	41	36	..	...	660
Orange Memorial Hosp.♣♣	Gen	NPAssn	400	253	75	2,111	9,181
St. Mary's Hospital♣♣	Gen	Church	151	108	35	1,605	3,721
Passaic, 61,204—Passaic							
Beth Israel Hospital♣	Gen	NPAssn	77	60	22	674	2,516
Passaic General Hospital♣♣	Gen	NPAssn	237	195	65	2,274	6,739
St. Mary's Hospital♣♣	Gen	Church	190	164	50	1,767	6,581
Paterson, 139,656—Passaic							
Hope Dell Hospital	Chr	County	425	373	..	...	126
Nathan and Miriam Barnert Memorial Hospital♣♣	Gen	NPAssn	116	100	29	1,686	3,904
Paterson General Hosp.♣♣	Gen	NPAssn	272	235	84	2,779	9,315
St. Joseph Hospital♣♣	Gen	Church	365	308	57	2,281	9,508
Valley View Sanatorium♣	TB	County	226	205	..	...	214
Perth Amboy, 41,242—Middlesex							
Perth Amboy General Hospital♣	Gen	NPAssn	205	157	45	1,361	6,421
Plainfield, 37,409—Union							
Muhlenberg Hospital♣♣	Gen	NPAssn	270	214	60	2,654	8,721
Point Pleasant, 2,082—Ocean							
Point Pleasant Hospital♣	Gen	NPAssn	48	32	10	275	1,073
Princeton, 7,719—Mercer							
Isabella McCosh Infirmary of Princeton University	Inst	NPAssn	55	11	..	...	959
Princeton Hospital♣	Gen	NPAssn	86	70	18	572	2,764
Rahway, 17,498—Union							
New Jersey Reformatory Hospital	Inst	State	16	3	..	...	252
Rahway Hospital♣	Gen	NPAssn	80	69	30	856	3,716
Red Bank, 10,974—Monmouth							
Riverview Hospital	Gen	NPAssn	40	40	15	550	2,233
Ridgewood, 14,948—Bergen							
Bergen Pines, Bergen County Hospital♣♣	Thlso	County	227	189	..	...	538
Riverside, 4,040—Burlington							
Zurbrugg Memorial Hospital♣	Gen	NPAssn	41	23	15	391	1,164
Salem, 8,618—Salem							
Salem County Memorial Hospital	Gen	NPAssn	48	41	20	701	1,936
Scotch Plains, 3,500—Union							
Bonnie Burn Sanatorium♣	TB	County	433	301	..	...	345
Secaucus, 9,754—Hudson							
Hudson County Contagious Disease Hospital♣	Iso	County	180	85	..	...	568
Hudson County General Hospital	InstGen	County	224	183	..	...	123
Hudson County Hospital for Mental Diseases♣	Ment	County	1,970	1,776	..	...	375
Skillman, 23—Somerset							
New Jersey State Village for Epileptics	Epil	State	1,443	1,449	..	...	152
Somers Po'nt, 1,992—Atlantic							
Shore Memorial Hospital♣	Gen	NPAssn	65	40	14	410	1,569
Somerville, 8,720—Somerset							
Somerset Hospital♣	Gen	NPAssn	150	154	40	1,457	5,625
South Amboy, 7,892—Middlesex							
South Amboy Memorial Hosp.	Gen	NPAssn	35	29	18	462	1,695
Summit, 16,165—Union							
Fair Oaks Sanatorium	N&M	Corp	48	43	..	...	213
Overlook Hospital♣♣	Gen	NPAssn	144	137	44	979	4,343
Sussex, 1,478—Sussex							
Alexander Linn Hospital	Gen	NPAssn	22	15	8	188	795
Teaneck, 23,275—Bergen							
Holy Name Hospital♣♣	Gen	Church	185	180	50	1,769	4,686
Trenton, 124,697—Mercer							
F. W. Donnelly Memorial Hospitals	Thlso	City	420	292	..	...	495
Glenwood Sanitarium	N&M	Indiv	20	18	..	...	88
Mercer Hospital♣♣	Gen	NPAssn	243	180	44	2,235	7,208
New Jersey State Hosp.♣♣	Ment	State	3,300	3,153	..	...	1,220
New Jersey State Prison Hospital♣	Inst	State	43	29	..	...	784
Orthopaedic Hospital and Dispensary♣♣	Orth	NPAssn	45	32	..	...	267
St. Francis Hospital♣♣	Gen	Church	300	224	35	1,936	10,752
Trenton General Hospital	Gen	NPAssn	60	33	13	942	1,386
William McKinley Memorial Hospital♣♣	Gen	NPAssn	119	96	19	1,047	3,808
Verona, 6,957—Essex							
Essex County Sanatorium♣♣	TB	County	444	313	..	...	382
Vineland, 7,914—Cumberland							
Newcomb Hospital♣♣	Gen	NPAssn	93	58	32	713	2,438
Weehawken (Union City P.O.), 14,763—Hudson							
North Hudson Hospital♣	Gen	NPAssn	166	91	25	580	3,516
Westfield, 18,458—Union							
Children's Country Home♣	Orth	NPAssn	30	23	..	...	30
Woodbury, 8,906—Gloucester							
Underwood Hospital♣	Gen	NPAssn	65	54	34	875	3,500
Wyckoff, 500—Bergen							
Christian Sanatorium	N&M	NPAssn	165	156	..	...	97

Key to symbols and abbreviations is on page 1386

NEW JERSEY—Continued

Related Institutions	Type of Service	Ownership or Control	Beds	Average Census Resident	Number of Births	Admissions
Atlantic City, 64,094—Atlantic						
Municipal Hospital	Iso	City	65	...	4	... ...
Caldwell, 4,932—Essex						
Theresa Grotta Home for Convalescents	Conv	NPAssn	60	24	..	... 268
Farmingdale, 600—Monmouth						
Tuberculosis Preventorium for Children	TB	NPAssn	250	127	..	... 449
Haddonfield, 9,742—Camden						
Bancroft School	MeDe	NPAssn	110	103	..	... 12
Jamesburg, 2,128—Middlesex						
New Jersey State Home for Boys	Inst	State	25	12	..	... 772
Jersey City, 301,173—Hudson						
Salvation Army Door-of-Hope Home and Hospital	Mat	Church	60	28	6	80 106
Little Falls, 5,000—Passaic						
North Jersey Training School	MeDe	State	55	32	..	... 1,043
Longport, 305—Atlantic						
Betty Bacharach Home for Afflicted Children	Orth	NPAssn	100	47	..	... 104
Menlo Park, 400—Middlesex						
New Jersey Home for Disabled Soldiers	Inst	State	83	78	..	... 67
Metuchen, 6,557—Middlesex						
Middlesex Nursing Home	Conv	Corp	60	58	..	... 169
Newark, 429,760—Essex						
Florence Crittenton Home	Mat	NPAssn	30	28	25	76 110
Ivy Haven	Inst	City	90	86	..	... 190
Newark Convalescent Hosp.	Conv	City	135	135	..	... 76
New Brunswick, 33,180—Middlesex						
Mary Kingsland Macy Wilkins Infirmary	Inst	NPAssn	22	5	..	... 208
Rutgers University Infirmary	Inst	NPAssn	11	5	..	... 217
New Lisbon, 213—Burlington						
Burlington County Mental Hospital	Ment	County	300	240	..	... 50
New Jersey State Colony	MeDe	State	900	805	..	... 113
Park Ridge, 2,519—Bergen						
Meyers Sanitarium	Conv	Indiv	73	70	..	... 73
Paterson, 139,656—Passaic						
Paterson City Hospital	Chrlso	City	110	33	..	... 234
Roseland, 1,556—Essex						
Mountain View Rest	N&M	Corp	22	20	..	... 9
Sea Isle City, 773—Cape May						
Sea Isle Hospital and Training School	MeDe	Corp	75	52	8	... 24
Trenton, 124,697—Mercer						
State Home for Girls	Inst	State	70	57	3	35 287
Upper Montclair,—Essex						
Montclair Sanitarium	Conv	Part	10	8	..	... 7
Vineland, 7,914—Cumberland						
New Jersey Memorial Home for Disabled Soldiers, Sailors, Marines and Their Wives and Widows	Inst	State	65	24	..	... 140
Training School at Vineland (Chandler Hospital)	MeDe	NPAssn	40	9	..	... 485
Vineland State School	MeDe	State	1,750	1,701	..	... 117
Westfield, 18,458—Union						
Brookside Nursing Home	Conv	Indiv	30	29	..	... 27
Woodbine, 2,111—Cape May						
State Colony for Feebleminded Males	MeDe	State	823	770	..	... 79

NEW MEXICO

Hospitals and Sanatoriums

Hospitals and Sanatoriums	Type of Service	Ownership or Control	Beds	Average Census Resident	Number of Births	Admissions
Albuquerque, 35,449—Bernalillo						
Albuquerque Indian Hospital[a]	Gen	IA	60	45	10	195 1,855
Albuquerque Indian Sanat.[a]	TB	IA	100	84	..	... 117
Atchison, Topeka and Santa Fe Hospital	Indus	NPAssn	67	30	..	... 1,214
Methodist Sanatorium	TB	Church	65	49	..	... 88
Nazareth Sanatorium	N&M	Church	50	16	..	... 207
St. Joseph Sanatorium and Hospital[a]	GenTb	Church	194	148	40	1,383 6,808
Southwestern Presbyterian Sanatorium[a]	GenTb	Church	158	130	22	780 3,150
Veterans Admin. Hospital[a-a]	Gen	Vet	305	271	..	... 1,800
Artesia, 4,071—Eddy						
Artesia Municipal Hospital	Gen	Church	25	15	8	328 1,174
Black Rock (Zuni P.O.)—McKinley						
Zuni Indian Hospital	Gen	IA	45	17	9	49 795
Carlsbad, 7,136—Eddy						
Carlsbad Memorial Hosp.	Gen	NPAssn	25	24	7	176 1,209
St. Francis Xavier Hospital	Gen	Church	45	39	17	460 2,114
Clayton, 3,188—Union						
St. Joseph Hospital	Gen	Church	25	12	9	116 467
Clovis, 10,825—Curry						
Atchison, Topeka and Santa Fe Hospital	Indus	NPAssn	37	29	..	... 417
Clovis Memorial Hospital	Gen	City	50	43	20	686 3,048
Crownpoint, 99—McKinley						
Eastern Navajo Hospital	Gen	IA	65	35	10	90 1,423
Dulce, 150—Rio Arriba						
Jicarilla Apache Hospital	Gen	IA	28	10	5	30 586
Embudo,—Rio Arriba						
Embudo Presbyterian Hosp.	Gen	Church	25	16	12	246 657

NEW MEXICO—Continued

Hospitals and Sanatoriums	Type of Service	Ownership or Control	Beds	Average Census Resident	Number of Births	Admissions
Farmington, 2,161—San Juan						
San Juan Episcopal Indian Mission Hospital	Gen	Church	22	18	3	76 581
San Juan Hospital	Gen	NPAssn	20	10	8	166 557
Fort Bayard, 750—Grant						
Veterans Admin. Hospital[a]	TB	Vet	285	208	..	... 1,040
Fort Stanton, 490—Lincoln						
U. S. Marine Hospital[a]	TB	USPHS	237	163	..	... 194
Gallup, 7,041—McKinley						
St. Mary's Hospital[a]	Gen	Church	90	45	12	336 2,050
Hobbs, 10,619—Lea						
Hobbs General Hospital	Gen	Indiv	21	14	9	400 1,395
Hot Springs, 2,940—Sierra						
Carrie Tingley Hospital for Crippled Children[a-a]	Orth	State	100	65	..	... 412
Virginia Ann Clinic and Hosp.	Gen	Indiv	20	7	6	68 354
Las Vegas, 5,941—San Miguel						
Las Vegas Hospital	Gen	NPAssn	32	15	9	95 897
New Mexico State Hospital	Ment	State	1,049	976	15	... 201
St. Anthony's Hospital	Gen	Church	70	50	15	340 2,753
Los Alamos, 100—Sandoval						
Los Alamos Hospital	Gen	NPAssn	101	48	13	211 2,323
Mescalero, 200—Otero						
Mescalero Apache Indian Hospital	Gen	IA	32	12	4	54 426
Raton, 7,607—Colfax						
New Mexico Miners' Hosp.[a-a]	Gen	State	83	29	10	262 1,408
Roswell, 13,482—Chaves						
St. Mary's Hospital	Gen	Church	90	67	20	796 3,382
Station Hospital[a]	Gen	Army	50	27	..	... 1,385
Santa Fe, 20,325—Santa Fe						
St. Vincent Hospital[a]	Gen	Church	75	55	15	614 2,742
Santa Fe Indian Hospital	Gen	IA	56	28	6	110 942
Santa Rita, 2,000—Grant						
Santa Rita Hospital	Gen	NPAssn	44	28	10	193 1,068
Shiprock, 125—San Juan						
Northern Navajo Hospital	Gen	IA	48	37	8	97 1,257
Silver City, 5,494—Grant						
Silver City General Hospital	Gen	Corp	30	31	12	415 1,294
Socorro, 3,712—Socorro						
Lehmann Hospital	Gen	Indiv	10	3	5	56 302
State Tuberculosis Sanat.	TB	State	77	75	..	... 133
Taos, 985—Taos						
Holy Cross Hospital	Gen	Church	32	17	9	204 1,050
Valmora, 125—Mora						
Valmora Sanatorium	TB	NPAssn	75	60	..	... 166

Related Institutions

Albuquerque, 35,449—Bernalillo						
Sandia Ranch Sanatorium	N&M	Indiv	15	6	..	... 60
Eunice, 1,227—Lea						
Barnsdall Hospital	Gen	Indiv	8	4	3	85 212
Lordsburg, 3,101—Hidalgo						
Lordsburg Hospital	Gen	Corp	20	6	3	60 240
Los Lunas, 656—Valencia						
Los Lunas Mental Hospital	MeDe	State	76	66	..	... 8
Taos, 985—Taos						
Taos Indian Hospital	Gen	IA	17	9	3	25 450

NEW YORK

Hospitals and Sanatoriums

Hospitals and Sanatoriums	Type of Service	Ownership or Control	Beds	Average Census Resident	Number of Births	Admissions
Albany, 130,577—Albany						
Albany Hospital[a-a-a]	GenTb	NPAssn	541	578	30	1,961 14,832
Anthony N. Brady Maternity Home[a-a-a]	Mat	Church	70	60	86	2,337 2,793
Child's Hospital	Chil	Church	65	37	..	... 1,240
Memorial Hospital[a-a-a]	Gen	NPAssn	137	135	20	628 3,661
St. Peter's Hospital[a-a-a]	Gen	Church	130	125	..	... 4,350
Albion, 4,660—Orleans						
Arnold Gregory Memorial Hospital	Gen	NPAssn	24	19	13	233 966
Amityville, 5,600—Suffolk						
Long Island Home[a-a]	N&M	Corp	208	199	..	... 491
Louden-Knickerbocker Hall	N&M	Corp	175	166	..	... 348
Amsterdam, 33,370—Montgomery						
Amsterdam City Hospital[a-a]	Gen	NPAssn	165	98	30	890 3,891
St. Mary's Hospital[a-a]	Gen	Church	120	114	22	921 3,065
Auburn, 35,753—Cayuga						
Auburn City Hospital[a-a-a]	Gen	NPAssn	260	194	40	1,289 6,758
Home for Convalescent and Crippled Children	Unit of Auburn City Hospital					
Mercy Hospital[a]	Gen	Church	85	70	14	427 1,450
Ballston Spa, 4,443—Saratoga						
Benedict Memorial Hospital	Gen	NPAssn	22	16	11	201 802
Batavia, 17,267—Genesee						
Genesee Memorial Hospital[a]	Gen	NPAssn	68	75	17	733 4,469
St. Jerome Hospital[a]	Gen	Church	82	62	12	613 3,191
Veterans Admin. Hospital[a-a]	Gen	Vet	294	267	..	... 2,510
Bath, 4,656—Steuben						
Bath Memorial Hospital[a]	Gen	NPAssn	60	40	8	538 2,121
Veterans Admin. Hospital[a-a]	Gen	Vet	400	380	..	... 3,410
Bay Shore, 10,000—Suffolk						
Dr. King's Hospital	Gen	Indiv	35	13	8	129 550
Southside Hospital[a]	Gen	NPAssn	93	107	24	1,413 5,920
Beacon, 12,872—Dutchess						
Craig House	N&M	Corp	80	42	..	... 51
Highland Hospital	Gen	NPAssn	40	29	11	334 1,201
Matteawan State Hospital[a]	Ment	State	1,616	1,617	..	... 175

Key to symbols and abbreviations is on page 1386

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NEW YORK—Continued

Hospitals and Sanatoriums	Type of Service	Ownership or Control	Beds	Average Census †	Resident Physicians	Number of Births	Admissions †
Bedford Hills, 2,000—Westchester							
Montefiore Hospital Country Sanatorium‡◆▲	TB	NPAssn	230	216	..	...	350
Bellevue, 1,317—Queens							
Hillside Hospital‡◆	N&M	NPAssn	80	80	..	...	224
Binghamton, 75,209—Broome							
Binghamton City Hosp.‡◆▲○	Gen	City	469	397	40	1,336	10,831
Binghamton State Hosp.‡◆○..	Ment	State	2,974	2,885	..	...	668
Our Lady of Lourdes Memorial Hospital‡◆▲	Gen	Church	80	83	22	1,040	2,964
Brentwood, 695—Suffolk							
Pilgrim State Hospital	See West Brentwood						
Ross Sanitarium	Conv	Indiv	50	48	..	...	104
Brockport, 2,500—Monroe							
Lakeside Memorial Hospital..	Gen	NPAssn	15	14	6	215	606
Bronxville, 6,600—Westchester							
Lawrence Hospital‡	Gen	NPAssn	104	104	20	839	3,611
Brooklyn, 2,698,285—Kings							
Adelphi Hospital	Gen	NPAssn	160	139	30	1,216	5,178
Bay Ridge Hospital‡▲	Gen	Corp	70	61	34	1,326	3,445
Bethany Deaconess Hospital..	Gen	Church	97	69	24	997	2,663
Beth-El Hospital‡◆▲	Gen	NPAssn	242	197	90	4,004	6,423
Beth Moses Hospital‡◆▲	See Maimonides Hospital						
Brooklyn Cancer Institute‡◆▲	Cancer	City	85	76	..	...	748
Brooklyn Doctors Hospital...	Gen	Corp	60	60	34	1,024	3,279
Brooklyn Eye and Ear Hospital‡◆▲	ENT	NPAssn	143	77	..	...	3,077
Brooklyn Hebrew Home and Hospital for Aged	ChrGen	NPAssn	711	691	..	...	256
Brooklyn Hospital‡◆▲○	Gen	NPAssn	330	259	44	1,631	8,913
Brooklyn State Hospital‡◆○..	Ment	State	3,540	3,427	..	...	1,913
Brooklyn Thoracic Hospital‡	TB	NPAssn	125	74	..	...	260
Brooklyn Womens Hospital‡	ObGyn	NPAssn	41	36	45	1,902	2,102
Bushwick Hospital‡◆▲	Gen	NPAssn	125	95	15	1,776	3,506
Caledonian Hospital‡▲	Gen	NPAssn	100	55	30	974	2,927
Carson C. Peck Memorial Hospital‡▲	Gen	NPAssn	107	72	20	1,520	3,600
Coney Island Hospital‡◆▲○....	Gen	City	770	720	90	915	6,302
Crown Heights Hospital.....	Gen	Corp	125	123	31	1,151	4,594
Cumberland Hospital‡◆▲○ ...	Gen	City	361	235	30	950	6,300
Evangelical Deaconess Hosp..	Gen	Church	84	59	37	1,400	2,952
Fort Hamilton Station Hosp.	Gen	Army	100	65	..	...	2,857
Greenpoint Hospital‡◆▲	Gen	City	260	216	32	1,572	6,674
Harbor Hospital	Gen	NPAssn	77	36	..	...	1,834
Hospital of the Holy Family‡◆	Gen	Church	116	94	..	...	2,250
House of St. Giles the Cripple‡◆	Orth	Church	44	35	..	...	161
Israel Hosp.‡◆▲	See Maimonides Hospital						
Jewish Hospital‡◆▲○	Gen	NPAssn	546	469	114	5,347	15,314
Jewish Sanitarium and Hospital for Chronic Diseases‡◆..	Chr	NPAssn	536	516	..	...	180
Kings County Hospital‡◆▲○..	Gen	City	2,200	1,295	130	3,363	61,130
Kingston Avenue Hospital‡◆▲	IncTb	City	415	343	..	...	3,304
Long Island College Hospital‡◆▲○	Gen	NPAssn	391	302	47	2,669	9,967
Lutheran Hospital‡▲	Gen	Church	80	80	30	830	3,643
Madison Park Hospital.....	Gen	Corp	105	98	27	2,324	4,579
Maimonides Hospital, Beth Moses Division‡◆▲	Gen	NPAssn	185	156	30	734	4,433
Maimonides Hospital, Israel Zion Division‡◆▲	Gen	NPAssn	265	250	142	5,998	11,805
Methodist Hospital‡◆▲○	Gen	Church	456	295	84	2,654	9,685
Midwood Hospital‡▲	Gen	Corp	55	42	21	897	2,290
Norwegian Lutheran Deaconesses' Home and Hospital‡◆▲○..	Gen	Church	210	185	53	1,643	7,233
Prospect Heights Hospital‡▲○	Gen	NPAssn	145	116	30	1,506	5,813
St. Catherine's Hospital‡◆▲	Gen	Church	287	240	57	1,987	7,808
St. Charles Hospital Orthopedic Clinic‡▲	Orth	Church	60	50	..	...	224
St. John's Hospital‡◆▲○.....	Gen	Church	320	170	33	944	4,606
St. Mary's Hospital‡◆▲○.....	Gen	Church	252	191	68	1,829	5,787
St. Peter's Hospital‡◆▲.....	Gen	Church	175	133	30	892	2,760
Samaritan Hospital	Gen	Church	85	83	27	1,161	2,413
Shore Road Hospital.....	Gen	Corp	80	72	20	957	2,868
Swedish Hospital	Gen	NPAssn	92	59	30	731	2,411
U. S. Naval Hospital‡◆▲.....	Gen	Navy	700	430	38	722	6,083
Unity Hospital‡◆	Gen	NPAssn	220	140	57	2,526	6,492
Veterans Admin. Hospital....	Gen	Vet	600	194	..	...	1,184
Victory Memorial Hospital...	Gen	NPAssn	85	49	27	988	2,294
Wade Hospital	Gen	Indiv	20	10	..	5	220
Williamsburgh Maternity Hosp.	Mat	Indiv	52	50	52	2,125	2,537
Wyckoff Heights Hospital‡▲..	Gen	NPAssn	167	120	25	1,135	4,922
Buffalo, 575,901—Erie							
Allied Hospitals of the Sisters of Charity							
Emergency Hospital‡▲	Gen	Church	173	139	..	...	4,851
Louise de Marillac Hosp.▲..	Unit of Sisters of Charity Hospital						
Sisters of Charity Hosp.‡◆▲○	Gen	Church	278	200	100	4,257	10,790
Buffalo Columbus Hospital..	Gen	NPAssn	113	95	14	552	3,662
Buffalo Eye and Ear Hospital and Wettlaufer Clinic..	ENT	NPAssn	14	9	..	...	728
Buffalo General Hosp.‡◆▲○...	Gen	NPAssn	450	400	50	1,351	10,757
Buffalo State Hospital‡◆○..	Ment	State	2,868	2,610	..	...	855
Children's Hospital‡◆▲○	MatCh	NPAssn	270	218	70	2,769	11,753
Deaconess Hospital‡◆▲○	Gen	NPAssn	280	231	51	1,852	9,301
Edward J. Meyer Memorial Hospital‡◆▲○	GenTb	County	535	780	32	766	10,583
Emergency Hospital‡▲	See Allied Hospitals of the Sisters of Charity						
Lafayette General Hospital..	Gen	NPAssn	64	34	17	317	1,681
Louise de Marillac Hospital▲..	See Allied Hospitals of the Sisters of Charity						
Mercy Hospital‡◆▲○	Gen	Church	196	181	60	1,962	6,062
Millard Fillmore Hosp.‡◆▲○..	Gen	NPAssn	337	261	107	4,133	13,201

NEW YORK—Continued

Hospitals and Sanatoriums	Type of Service	Ownership or Control	Beds	Average Census †	Resident Physicians	Number of Births	Admissions †
Boswell Park Memorial Institute‡◆▲	Cancer	State	100	97	..	...	1,841
St. Francis Hospital.....	Gen	Church	53	43	..	...	2,079
Sisters of Charity Hospital..	See Allied Hospitals of the Sisters of Charity						
U. S. Marine Hospital‡▲.....	Gen	USPHS	80	70	..	...	1,398
Callicoon, 826—Sullivan							
Callicoon Hospital	Gen	Indiv	20	11	5	132	436
Cambridge, 1,572—Washington							
Mary McClellan Hospital‡◆▲○..	Gen	NPAssn	100	68	15	290	1,578
Canandaigua, 6,321—Ontario							
Brigham Hall Hospital.....	N&M	Corp	70	67	..	...	160
Frederick Ferris Thompson Hospital‡▲	Gen	NPAssn	101	89	20	390	2,692
Veterans Admin. Hospital‡◆▲..	Ment	Vet	1,742	1,601	..	...	737
Canadaigua, 514—Chautauqua							
Newton Memorial Hospital‡▲..	TB	County	174	127	..	...	144
Castle Point, 25—Dutchess							
Veterans Admin. Hospital‡◆▲..	TB	Vet	619	565	..	...	604
Catskill, 5,429—Greene							
Memorial Hospital of Greene County‡▲	Gen	StateCo	70	57	15	533	2,382
Central Islip, 2,000—Suffolk							
Central Islip State Hosp.‡◆○	Ment	State	8,246	7,796	..	...	1,695
Central Valley, 1,049—Orange							
Falkirt in the Ramapos.....	N&M	Indiv	40	29	..	...	16
Chatham, 2,254—Columbia							
Community Hospital	Gen	Indiv	35	8	5	84	266
Chenango Bridge, 400—Broome							
Broome County Tuberculosis Hospital‡▲	TB	County	94	80	..	...	122
Clifton Springs, 1,413—Ontario							
Clifton Springs Sanitarium and Clinic‡◆▲	Gen	NPAssn	275	148	10	280	5,661
Cohoes, 21,925—Albany							
Cohoes Hospital	Gen	NPAssn	61	43	12	342	1,681
Cold Spring, 1,967—Putnam							
Julia L. Butterfield Memorial Hospital	Gen	NPAssn	45	16	5	117	634
Cooperstown, 2,295—Otsego							
Mary Imogene Bassett Hospital‡◆▲	Gen	NPAssn	100	81	10	460	2,864
Copiague, 2,000—Suffolk							
Nassau Suffolk General Hosp.	Gen	Indiv	45	32	..	...	1,526
Corning, 16,212—Steuben							
Corning Hospital	Gen	NPAssn	108	76	25	1,013	3,715
Cornwall, 1,978—Orange							
Cornwall Hospital‡▲	Gen	NPAssn	66	35	15	295	1,412
Cortland, 15,881—Cortland							
Cortland County Hospital‡▲..	Gen	NPAssn	120	96	26	846	3,944
VerNooy Sanitarium	Gen	Indiv	18	15	7	326	662
Croton on Hudson, 3,843—Westchester							
Croton Manor Sanitarium....	N&M	Indiv	94	74	..	...	264
Cuba, 1,699—Allegany							
Cuba Memorial Hospital.....	Gen	NPAssn	28	26	10	256	1,106
Dannemora, 4,630—Clinton							
Clinton Prison General Hosp.	Inst	State	173	111	..	...	867
Dannemora State Hospital..	Ment	State	1,270	1,130	..	...	105
Dansville, 4,967—Livingston							
Dansville General Hospital...	Gen	NPAssn	50	35	11	250	1,415
Delhi, 1,841—Delaware							
Delhi Hospital	Gen	NPAssn	16	9	6	133	476
Dobbs Ferry, 5,883—Westchester							
Dobbs Ferry Hospital‡▲.....	Gen	NPAssn	46	33	10	188	1,133
Dunkirk, 17,713—Chautauqua							
Brooks Memorial Hospital‡▲..	Gen	NPAssn	113	70	27	729	3,043
Elizabethtown, 640—Essex							
Community Hospital	Gen	NPAssn	14	8	6	74	188
Ellenville, 4,008—Ulster							
Veterans Memorial Hospital..	Gen	NPAssn	22	18	8	218	671
Elmira, 45,106—Chemung							
Arnot-Ogden Memorial Hospital‡◆○	Gen	NPAssn	185	142	32	1,680	6,026
Chemung County Sanatorium	TB	County	41	37	..	...	33
St. Joseph's Hospital‡◆○....	Gen	Church	253	196	36	721	6,286
Endicott, 17,702—Broome							
Bradford Lord Memorial Hospital	Unit of Binghamton City Hospital						
Ideal Hospital‡◆▲	Gen	City	96	88	30	930	2,901
Farmingdale, 1,324—Nassau							
Nassau County Tuberculosis Hospital‡◆▲	TB	County	357	292	..	...	251
Far Rockaway,—Queens							
Hospital for Joint Diseases, Country Branch	Unit of Hosp. for Joint Diseases, N. Y. C.						
St. Joseph Hospital‡◆▲.....	Gen	Church	120	80	36	849	3,513
Fillmore, 518—Allegany							
Genesee Country Memorial Hospital	Gen	NPAssn	16	7	6	116	263
Flushing,—Queens							
Flushing Hospital and Dispensary‡◆▲○	Gen	NPAssn	230	217	110	2,918	9,740
Parsons Hospital	Gen	Corp	60	56	20	780	1,830
Fort Totten,—Queens							
Station Hospital	Gen	Army	75	41	20	212	1,209
Freeport, 20,410—Nassau							
Freeport Hospital	Gen	Corp	32	23	20	456	1,550
Fulton, 13,262—Oswego							
Albert Lindley Lee Memorial Hospital	Gen	City	61	47	16	681	3,882
Gabriels, 300—Franklin							
Sanatorium Gabriels▲	TB	Church	150	128	..	...	147

NEW YORK—Continued

Hospitals and Sanatoriums	Type of Service	Ownership or Control	Beds	Average Census †	Bassinets	Number of Births	Admissions †
Geneva, 15,555—Ontario							
Geneva General Hospital♣	Gen	NPAssn	102	92	25	683	2,967
Glen Cove, 12,445—Nassau							
North Country Community Hospital♣	Gen	NPAssn	109	86	30	1,023	3,041
Glens Falls, 18,826—Warren							
Glens Falls Hospital♣	Gen	NPAssn	150	132	51	1,756	6 636
Westmount Sanatorium	TB	County	48	36	..	....	44
Gloversville, 23,239—Fulton							
Nathan Littauer Hosp.†♣	Gen	NPAssn	133	113	30	1,163	4,284
Goshen, 3,053—Orange							
Goshen Hospital	Gen	NPAssn	38	27	12	229	1,051
Interpines	N&M	Indiv	50	28	..	....	103
Gouverneur, 4,478—St. Lawrence							
Stephen B. Van Duzee Hosp.♣	Gen	NPAssn	34	18	12	417	827
Governors Island,—New York							
Station Hospital♣	Gen	Army	330	224	..	....	5,085
Gowanda, 3,156—Cattaraugus							
Townsend Hospital	Gen	NPAssn	23	16	10	434	1,364
Granville, 3,173—Washington							
Emma Laing Stevens Hosp.	Gen	NPAssn	19	12	12	198	436
Green Haven, 50—Dutchess							
Station Hospital	Gen	Army	100	40	..	....	1,436
Greenport, 3,250—Suffolk							
Eastern Long Island Hosp.	Gen	Corp	47	38	13	412	1,696
Harrison, 8,500—Westchester							
St. Vincent's Retreat	N&M	Church	300	175	..	....	100
Helmuth, 100—Erie							
Gowanda State Homeopathic Hospital♣○	Ment	State	3,018	2,799	..	....	700
Hempstead, 30,856—Nassau							
Meadowbrook Hospital♣○♣	Gen	County	250	210	24	441	4,941
Herkimer, 9,617—Herkimer							
Herkimer Memorial Hospital	Gen	NPAssn	52	47	18	331	1,626
Holtsville, 260—Suffolk							
Suffolk Sanatorium	TB	County	110	95	..	....	71
Hornell, 15,648—Steuben							
Bethesda Hospital	Gen	NPAssn	45	32	10	285	1,421
St. James Mercy Hospital♣	Gen	Church	102	84	23	482	4,980
Hudson, 11,317—Columbia							
Hudson City Hospital♣	Gen	NPAssn	100	98	18	648	5,933
Huntington, 11,238—Suffolk							
Huntington Hospital♣	Gen	NPAssn	81	66	17	941	3,409
Ilion, 8,267—Herkimer							
Ilion Hospital	Gen	NPAssn	53	42	18	472	1,711
Irvington, 3,272—Westchester							
Irvington House*	ChilCard	NPAssn	100	96	..	....	54
Ithaca, 19,730—Tompkins							
Cornell Univ. Infirmary♣	Inst	NPAssn	154	22	..	....	1,800
Hermann M. Biggs Memorial Hospital♣○	TB	State	250	174	..	....	275
Tompkins County Memorial Hospital♣	Gen	NPAssn	143	105	28	1,308	4,633
Jackson Heights,—Queens							
Physicians Hospital	Gen	Corp	127	120	44	2,027	6,240
Jamaica,—Queens							
Jamaica Hospital○♣	Gen	NPAssn	165	171	40	1,781	6,250
Mary Immaculate Hosp.○♣♣	Gen	Church	373	272	63	2,316	8,300
Memorial Hospital	Gen	Indiv	75	50	9	1,122	3,714
Queens General Hosp.○♣♣	Gen	City	705	649	82	1,915	14,625
Triboro Hospital♣○	TB	City	557	448	..	....	459
Jamestown, 40,636—Chautauqua							
Jamestown General Hospital♣	Gen	City	137	107	22	609	4,481
Woman's Christian Association Hospital♣○	Gen	NPAssn	127	122	22	1,313	5,412
Johnson City, 18,026—Broome							
Charles S. Wilson Memorial Hospital○♣○	Gen	NPAssn	360	287	40	1,727	9,304
Katonah, 1,800—Westchester							
Four Winds	N&M	Corp	37	25	..	....	43
Pinewood Sanitarium*	N&M	Part	85	54	..	....	186
Kew Gardens,—Queens							
Kew Gardens General Hosp.	Gen	Indiv	164	118	58	1,868	6,147
Kings Park, 2,500—Suffolk							
Kings Park State Hosp.♣○	Ment	State	7,036	6,644	..	....	1,717
Kingston, 26,566—Ulster							
Benedictine Hospital (Our Lady of Victory Sanit.)♣○	Gen	Church	92	78	18	546	2,778
Kingston Hospital♣○	Gen	NPAssn	118	89	15	995	1,710
Ulster County Tuberculosis Hospital♣	TB	County	57	51	..	....	80
Lackawanna, 24,058—Erie							
Moore Taylor Hospital♣	Indus	NPAssn	28	10	..	....	297
Our Lady of Victory Hosp.♣♣	Gen	Church	175	156	41	1,524	5,060
Lake Kushaqua, 200—Franklin							
Stony Wold Sanatorium♣	TB	NPAssn	145	97	..	....	79
Lake Placid, 3,134—Essex							
Lake Placid General Hosp.	Gen	City	19	12	6	88	454
Liberty, 3,788—Sullivan							
Mamisadoc Hospital	Gen	NPAssn	28	28	6	261	1,055
Workmen's Circle Sanatorium	TB	NPAssn	75	42	..	....	77
Little Falls, 10,163—Herkimer							
Little Falls Hospital♣	Gen	NPAssn	85	64	17	613	2,592
Livingston, 400—Columbia							
Potts Memorial Institute♣	TB	NPAssn	61	51	..	....	31
Lockport, 24,379—Niagara							
Lockport City Hospital	Gen	City	142	106	30	1,092	4,525
Niagara Sanatorium♣♣	TB	County	200	168	..	....	171
Long Beach, 9,636—Nassau							
Long Beach Memorial Hospital♣	Gen	NPAssn	53	35	7	194	1,429

NEW YORK—Continued

Hospitals and Sanatoriums	Type of Service	Ownership or Control	Beds	Average Census †	Bassinets	Number of Births	Admissions †
Long Island City,—Queens							
Astoria Sanatorium	Gen	Indiv	26	21	10	884	1,202
Boulevard Hospital♣	Gen	Corp	125	90	38	2,259	6,232
River Crest Sanitarium♦	N&M	Corp	132	102	..	....	331
St. John's Long Island City Hospital○♣○	Gen	Church	229	180	39	1,239	6,159
Lowville, 3,578—Lewis							
Lewis County General Hosp.	Gen	StateCo	46	35	19	410	1,504
Lyons, 3,863—Wayne							
Edward J. Barber Hospital	Gen	Indiv	25	20	3	153	688
Lyons Hospital	Gen	Corp	25	18	6	172	711
Malone, 5,745—Franklin							
Alice Hyde Memorial Hosp.♣	Gen	NPAssn	80	61	16	560	2,500
Marcy, 800—Oneida							
Marcy State Hospital♣♣○	Ment	State	2,812	2,328	..	....	614
Margaretville, 812—Delaware							
Margaretville Hospital	Gen	NPAssn	52	29	12	156	1,474
Massena, 11,328—St. Lawrence							
Massena Memorial Hospital	Gen	City	50	45	20	576	2,540
Medina, 5,871—Orleans							
Medina Memorial Hospital♣	Gen	NPAssn	36	28	10	300	2,760
Middle Grove, 100—Saratoga							
Saratoga County Tuberculosis Hospital♣	TB	County	60	40	..	....	41
Middletown, 27,908—Orange							
Elizabeth A. Horton Memorial Hospital♣	Gen	NPAssn	90	81	18	298	2,813
Middletown Sanitarium and Hospital	Gen	Part	50	38	8	402	1,492
Middletown State Homeopathic Hospital♣♣○	Ment	State	3,454	3,320	..	....	432
Mineola, 10,604—Nassau							
Nassau Hospital♣♣♣	Gen	NPAssn	297	187	50	1,357	7,051
Mineville, 600—Essex							
Mineville Hospital	Indus	NPAssn	18	12	..	....	327
Mitchell Field, Nassau—Station Hospital♣	Gen	Army	250	116	12	327	2,728
Monticello, 3,737—Sullivan							
Hamilton Avenue Hospital	Gen	Indiv	21	17	4	146	566
Monticello Hospital	Gen	NPAssn	36	25	5	121	1,261
Montour Falls, 1,345—Schuyler							
Shepard Bell Hospital	Gen	NPAssn	34	22	12	285	1,002
Mount Kisco, 5,941—Westchester							
Northern Westchester Hosp.♣	Gen	NPAssn	95	91	25	550	3,713
Mount Morris, 3,550—Livingston							
Mount Morris Tuberculosis Hospital♣♣○	TB	State	250	167	..	....	143
Mount Vernon, 67,232—Westchester							
Mount Vernon Hospital♣♣○	Gen	NPAssn	224	170	59	1,754	7,774
Newark, 9,646—Wayne							
Newark Hospital	Gen	Indiv	26	19	6	248	949
Newburgh, 31,883—Orange							
Estelle and Walter C. Odell Memorial Sanatorium	TB	County	50	35	..	....	40
St. Luke's Hospital♣♣	Gen	NPAssn	196	151	52	966	5,762
Station Hospital	Gen	Army	119	11	..	....	605
New Rochelle, 54,464—Westchester							
New Rochelle Hospital○♣○	Gen	NPAssn	309	267	69	1,666	8,887
New York City, 4,582,976—New York							
Babies Hospital♣○	Unit of Presbyterian Hospital						
Beekman-Downtown Hosp.♣♣	Gen	NPAssn	56	24	..	....	1,800
Bellevue Hospital♣♣○	Gen	City	2,700	2,367	85	9,467	59,511
Beth David Hospital♣♣	Gen	NPAssn	350	327	77	792	4,007
Beth Israel Hospital♣♣○	Gen	NPAssn	326	256	80	2,740	8,939
Bronx Eye and Ear Infirmary♣♣	ENT	NPAssn	54	25	..	....	3,727
Bronx Hospital♣♣	Gen	NPAssn	368	254	84	3,164	9,267
Bronx Maternity and Woman's Hospital	MatGyn	NPAssn	51	25	40	750	906
Charles B. Towns Hospital	Drug	Corp	23	20	..	....	1,480
Columbus Hospital♣♣	Gen	Church	260	184	60	294	5,844
Columbus Hospital Extension	See Mother Cabrini Memorial Hospital						
Doctors Hospital♣♣	Gen	NPAssn	271	213	62	1,737	6,456
Endoural Hospital	ENT	Indiv	23	22	..	....	866
Flower and Fifth Avenue Hospital♣♣○	Gen	NPAssn	327	321	92	1,797	11,624
Fordham Hospital♣♣○	Gen	City	471	456	34	1,464	12,718
French Hospital♣♣♣	Gen	NPAssn	251	203	62	1,567	6,311
Goldwater Memorial Hospital♣♣	GenChr	City	1,610	1,543	..	....	1,372
Gotham Hospital	Gen	Corp	161	67	24	626	3,232
Gouverneur Hospital♣♣♣	Gen	City	350	183	20	....	5,833
Harkness Pavilion	Unit of Presbyterian Hospital						
Harlem Eye and Ear Hosp.♣♣	ENT	NPAssn	40	7	..	....	2,495
Harlem Hospital♣♣♣○	Gen	City	635	686	162	3,260	20,768
House and Hospital of the Daughters of Jacob	InstGen	NPAssn	543	243	..	....	122
Home for Aged and Infirm Hebrew♣	InstGen	NPAssn	66	64	..	....	103
Hosp. for Joint Diseases♣♣♣	Gen	NPAssn	242	205	..	....	3,560
Hosp. for Special Surgery♣♣	Orth	NPAssn	225	179	..	....	3,253
Hospital of the Rockefeller Institute for Medical Research♣	Gen	NPAssn	60	17	..	....	120
Jewish Maternity Hospital	Unit of Beth Israel Hospital						
Jewish Memorial Hospital♣♣♣	Gen	NPAssn	185	150	44	1,775	5,731
Knickerbocker Hospital♣♣♣	Gen	NPAssn	180	145	..	29	4,044
Lebanon Hospital♣♣♣	Gen	NPAssn	303	179	29	1,389	5,435
Left-Central Maternity Hosp.	Mat	Indiv	39	38	39	1,600	1,798
Lenox Hill Hospital♣♣♣○	Gen	NPAssn	502	455	68	3,284	12,649
Le Roy Sanitarium	Gen	Corp	51	41	20	466	1,577

Key to symbols and abbreviations is on page 1386

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NEW YORK—Continued

Hospitals and Sanatoriums	Type of Service	Ownership or Control	Beds	Average Census †	Bassinets	Number of Births	Admissions †
Lexington Hospital	Gen	Corp	78	55	14	280	2,947
Lincoln Hospital●◆▲	Gen	City	359	428	70	2,087	12,770
Lutheran Hospital	Gen	NPAssn	120	85	30	723	3,613
Lying In Hospital●◆▲	Unit of New York Hospital						
Manhattan Eye, Ear and Throat Hospital●◆▲	ENT	NPAssn	210	129	..	..	10,976
Manhattan General Hospital	Gen	Corp	360	298	50	2,235	9,091
Manhattan Maternity and Dispensary	Unit of New York Hospital						
Manhattan State Hospital●◆▲	Ment	State	3,981	3,921	..	...	2,330
Medical Arts Center Hospital	Gen	Corp	141	56	..	...	2,427
Memorial Hospital●◆▲	Cancer	NPAssn	242	195	..	...	5,300
Metropolitan Hospital●◆▲	Gen	City	1,000	1,045	40	1,415	10,701
Midtown Hospital▲	Gen	NPAssn	61	47	..	2	2,060
Misericordia Hospital●◆▲	Gen	Church	161	130	85	1,540	5,257
Montefiore Hospital for Chronic Diseases●	GenTb	NPAssn	573	512	..	...	2,856
Morrisania City Hosp.●◆▲	Gen	City	466	494	45	1,304	13,326
Mother Cabrini Memorial Hospital●▲	Gen	Church	175	99	30	756	3,612
Mount Eden Hospital	Gen	Indiv	40	40	20	600	2,300
Mount Sinai Hospital●◆▲	Gen	NPAssn	805	631	..	...	16,171
Neurological Institute of New York●◆▲	Unit of Presbyterian Hospital						
New York City Cancer Institute Hospital●▲	Cancer	City	210	180	..	...	743
New York City Hospital●◆▲	Gen	City	820	672	80	1,115	10,167
New York Eye and Ear Infirmary●◆▲	ENT	NPAssn	185	128	..	...	6,517
New York Foundling Hosp.●	Chil	Church	279	63	..	...	703
New York Hospital●◆▲	Gen	NPAssn	1,017	858	121	3,889	20,172
New York Infirmary●◆▲	Gen	NPAssn	121	81	40	1,055	2,899
New York Nursery and Childs Hospital	Unit of New York Hospital						
New York Orthopaedic Dispensary and Hospital●◆	Unit of Presbyterian Hospital						
New York Polyclinic Medical School and Hospital●◆▲	Gen	NPAssn	374	257	37	1,314	9,301
New York Post-Graduate Medical School and Hosp.●◆▲	Gen	NPAssn	460	338	..	...	9,130
New York Skin and Cancer Hospital	Unit of New York Post-Graduate Medical School and Hospital						
New York State Psychiatric Institute and Hospital●◆▲	Ment	State	150	121	..	...	249
Park East Hospital	Gen	Corp	194	160	94	1,224	8,561
Parkway Hospital	Gen	NPAssn	75	39	15	536	2,604
Park West Hospital	Gen	Corp	85	58	12	548	4,230
Payne Whitney Psychiatric Clinic●	Unit of New York Hospital						
Presbyterian Hospital●◆▲	Gen	NPAssn	1,419	1,185	144	3,238	29,670
Psychiatric Pavilion	Unit of Bellevue Hospital						
Reconstruction Hospital	Unit of New York Post-Graduate Medical School and Hospital						
Riker's Island Hospital▲	Chr	City	236	104	..	...	2,995
Roosevelt Hospital●◆▲	Gen	NPAssn	373	290	..	...	8,702
St. Ann's Maternity Hospital	Unit of New York Foundling Hospital						
St. Barnabas Hospital for Chronic Diseases●	Chr	NPAssn	470	457	..	...	304
St. Clare's Hospital●◆▲	Gen	Church	541	377	70	1,751	9,090
St. Elizabeth's Hospital●◆▲	Gen	Church	155	126	33	947	4,743
St. Francis Hospital●◆▲	Gen	Church	355	275	54	2,000	7,800
St. Joseph's Hospital for Chest Diseases●◆▲	TB	Church	295	283	..	...	686
St. Luke's Hospital●◆▲	Gen	NPAssn	520	411	..	...	9,086
St. Vincent's Hospital●◆▲	Gen	Church	544	376	100	2,368	13,116
Seton Hospital (Male Div.)▲	TB	City	306	306	..	...	310
Seton Hosp. (Nazareth Branch for Women and Children)▲	TB	City	247	247	..	...	446
Sloane Hosp. for Women●◆▲	Unit of Presbyterian Hospital						
Square Sanitarium	Gen	Corp	150	127	60	2,513	7,897
Sydenham Hospital●◆▲	Gen	NPAssn	300	174	42	1,186	5,614
Union Hospital	Gen	NPAssn	111	73	32	616	2,625
U. S. Marine Hospital●▲	Gen	USPHS	453	312	..	...	4,366
University Heights Sanitarium	Gen	Corp	60	39	..	400	2,450
Veterans Admin. Hospital●◆▲	Gen	Vet	1,895	1,495	..	...	10,388
West Hill Sanitarium	N&M	Indiv	91	86	..	...	256
Willard Parker Hospital▲	Inf	City	433	179	..	...	8,743
Wm. Booth Memorial Hosp.▲	Gen	Church	49	39	24	531	1,329
Woman's Hospital●◆▲	GynOb	NPAssn	215	152	100	2,662	5,334
Niagara Falls, 78,695—Niagara							
Mount St. Mary's Hosp.▲●	Gen	Church	185	152	64	1,515	6,505
Niagara Falls Memorial Hospital▲	Gen	NPAssn	292	172	48	1,519	7,266
Northport, 3,603—Suffolk							
Veterans Admin. Hospital●◆▲	Ment	Vet	2,767	2,666	..	...	676
North Tonawanda, 30,254—Niagara							
De Graff Memorial Hospital	Gen	City	87	56	35	811	2,980
Norwich, 8,049—Chenango							
Chenango Memorial Hospital	Gen	NPAssn	81	54	15	553	2,027
Nyack, 5,956—Rockland							
Nyack Hospital▲	Gen	Corp	91	73	20	668	2,850
Ogdensburg, 16,346—St. Lawrence							
A. Barton Hepburn Hosp.▲●	Gen	Church	160	143	30	599	4,678
St. Lawrence State Hosp.●◆▲	Ment	State	2,344	2,049	..	...	373
Olean, 21,256—Cattaraugus							
Mountain Clinic Hospital	Gen	Part	33	20	6	161	805
Olean General Hospital▲	Gen	NPAssn	85	76	24	669	2,923
Rocky Crest Sanatorium●	TB	County	60	39	..	...	22
St. Francis Hospital▲	Gen	Church	100	73	24	826	2,499
Oneida, 10,291—Madison							
Main Street Hospital	Gen	Indiv	16	8	4	53	422
Oneida City Hospital▲	Gen	City	80	60	19	839	2,650

NEW YORK—Continued

Hospitals and Sanatoriums	Type of Service	Ownership or Control	Beds	Average Census †	Bassinets	Number of Births	Admissions †
Oneonta, 11,731—Otsego							
Aurelia Osborn Fox Memorial Hospital▲	Gen	NPAssn	88	61	17	524	2,248
Homer Folks Tuberculosis Hospital●◆●	TB	State	250	180	..	...	264
Orangeburg, 750—Rockland							
Rockland State Hospital●◆▲	Ment	State	6,822	6,120	..	...	1,675
Ossining, 15,906—Westchester							
Ossining Hospital▲	Gen	NPAssn	65	58	12	562	2,243
Sing Sing Prison Hospital▲	Inst	State	84	25	..	...	207
Stony Lodge Sanitarium●	N&M	Indiv	32	22	..	...	98
Oswego, 22,062—Oswego							
Oswego Hospital	Gen	NPAssn	76	54	13	628	2,706
Otisville, 886—Orange							
Municipal Sanatorium●◆	TB	City	420	373	..	...	510
Peekskill, 17,311—Westchester							
Peekskill Hospital	Gen	NPAssn	79	50	25	513	2,270
Penn Yan, 5,208—Yates							
Soldiers and Sailors Memorial Hospital	Gen	NPAssn	50	32	10	786	1,448
Perrysburg, 375—Cattaraugus							
J. N. Adam Memorial Hosp.▲	TB	City	442	341	..	...	319
Philmont, 1,679—Columbia							
Columbia County Tuberculosis Sanatorium	TB	County	72	50	..	...	82
Plattsburg, 16,351—Clinton							
Champlain Valley Hospital▲	Gen	NPAssn	106	106	15	867	3,981
Physicians Hospital▲	Gen	NPAssn	125	84	36	564	3,519
Pomona, 50—Rockland							
Summit Park Sanatorium●	TB	County	91	85	..	...	70
Port Chester, 23,073—Westchester							
Brookhaven Farm	N&M	Indiv	18	18	..	...	20
Mary Harkness Convalescent Home	Unit of Presbyterian Hosp., New York City						
St. Luke's Convalescent Hosp.	See Greenwich, Conn.						
United Hospital●▲	Gen	NPAssn	182	136	32	1,339	5,839
Port Jefferson, 3,206—Suffolk							
John T. Mather Memorial Hospital▲	Gen	NPAssn	70	64	24	778	3,065
St. Charles Hospital for Crippled Children●▲	Orth	Church	200	176	..	...	200
Wharton Memorial Institute	Unit of St. Charles Hospital for Crippled Children						
Port Jervis, 9,749—Orange							
St. Francis Hospital▲	Gen	Church	58	38	11	946	1,513
Potsdam, 4,871—St. Lawrence							
Potsdam Hospital▲	Gen	NPAssn	75	78	22	452	2,486
Poughkeepsie, 40,478—Dutchess							
Hudson River State Hosp.●◆●	Ment	State	4,843	4,741	..	...	835
St. Francis Hospital●◆▲	Gen	Church	167	100	25	431	5,071
Samuel and Nettie Bowne Hospital	TB	NPAssn	50	42	..	...	118
Samuel W. Bowne Memorial Hospital▲	TB	City	135	127	..	...	98
Vassar Brothers Hospital●◆▲	Gen	NPAssn	207	180	43	1,793	6,843
Queens Village,—Queens							
Creedmoor State Hospital●◆●	Ment	State	5,103	5,074	..	...	1,256
Ray Brook, 350—Essex							
Ray Brook State Tuberculosis Hospital●◆▲	TB	State	375	301	..	...	343
Rhinebeck, 1,697—Dutchess							
Northern Dutchess Health Service Center▲	Gen	NPAssn	35	41	8	214	1,890
Richland, 300—Oswego							
Oswego County Tuberculosis Hospital▲	TB	County	98	56	..	...	54
Rochester, 324,975—Monroe							
Genesee Hospital●◆▲	Gen	NPAssn	298	199	38	1,307	8,832
Highland Hospital●◆▲	Gen	NPAssn	300	169	60	1,901	6,835
Iola-Monroe County Tuberculosis Sanatorium●▲	TB	County	350	307	..	...	332
Monroe County Hospital▲	Gen	County	300	457	70	...	3,174
Park Avenue Hospital▲	Gen	NPAssn	92	75	20	566	3,300
Rochester General Hosp.●◆▲	Gen	NPAssn	704	550	63	2,841	12,783
Rochester Municipal Hosp.●◆▲	See Strong Memorial-Rochester Municipal Hospitals						
Rochester State Hospital●◆●	Ment	State	2,364	2,179	..	...	746
St. Mary's Hospital●◆▲	Gen	Church	225	214	65	2,539	12,472
Strong Memorial-Rochester Municipal Hospitals●◆▲	Gen	NPAssnCy	642	530	72	2,163	17,681
Rockaway Beach,—Queens							
Rockaway Beach Hospital▲	Gen	NPAssn	100	72	15	456	3,114
U. S. Marine Hospital	TB	USPHS	200	200	..	...	434
Rockville Centre, 18,613—Nassau							
Mercy Hospital▲	Gen	Church	150	122	60	2,224	5,621
South Nassau Communities Hospital▲	Gen	NPAssn	115	104	40	1,622	4,724
Rome, 34,214—Oneida							
Oneida County Hospital	Gen	County	180	178	5	95	1,550
Rome Hospital and Murphy Memorial Hospital▲	Gen	City	63	60	30	1,760	5,005
Rome State School	McDe	State	4,827	4,827	..	...	290
Roslyn, 972—Nassau							
St. Francis Sanatorium for Cardiac Children●	Card	Church	163	150	..	...	144
Roslyn Heights, 1,500—Nassau							
Roslyn Park Hospital	Gen	Corp	32	27	16	388	1,359
St. Albans,—Queens							
U. S. Naval Hospital●◆▲	Gen	Navy	1,550	1,453	..	...	10,637
Salamanca, 9,011—Cattaraugus							
City Hospital	Gen	City	61	40	14	459	2,794

Key to symbols and abbreviations is on page 1366

NEW YORK—Continued

Hospitals and Sanatoriums	Type of Service	Ownership or Control	Beds	Average Census †	Bassinets	Number of Births	Admissions †
Salisbury Center, 331—Herkimer							
Pine Crest Sanatorium♦△	TB	County	65	57	..	...	45
Saranac Lake, 7,138—Franklin							
General Hospital△	Gen	NPAssn	50	35	8	230	1,719
Northwoods Sanatorium	TB	NPAssn	26	25	..	...	26
Prescott House	TB	NPAssn	20	20	..	...	21
Will Rogers Memorial Hosp.△	TB	NPAssn	80	65	..	...	48
Saratoga Springs, 13,765—Saratoga							
Saratoga Hospital△	Gen	NPAssn	90	75	17	427	2,473
Veterans Admin. Hospital	Gen	Vet	50	28	..	...	263
Schenectady, 87,549—Schenectady							
Eastern New York Orthopedic Hosp. School "Sunny View"	Orth	NPAssn	35	35	..	...	52
Ellis Hospital♦△	Gen	NPAssn	400	343	85	1,647	12,432
Schenectady County Tuberculosis Hospital (Glenridge Sanatorium)♦△	TB	County	131	112	..	...	112
Seneca Falls, 6,452—Seneca							
Seneca Falls Hospital	Gen	City	31	32	12	308	1,111
Sidney, 3,012—Delaware							
The Hospital	Gen	City	29	33	13	313	1,349
Sodus, 1,515—Wayne							
J. F. Myers Hospital	Gen	Indiv	25	17	7	191	497
Sonyea, 500—Livingston							
Craig Colony♦	Epil	State	2,311	2,242	..	...	265
Southampton, 3,818—Suffolk							
Southampton Hospital♦△	Gen	NPAssn	100	69	20	611	3,275
Stamford, 1,068—Delaware							
Bathgate Hospital	Gen	NPAssn	18	8	6	96	401
Stapleton (Staten Island P.O.),—Richmond							
U. S. Marine Hospital♦♦△	Gen	USPHS	1,027	731	23	289	12,743
Staten Island, 174,441—Richmond							
Richmond Borough Hospital	Iso	City	49	12	..	...	295
Richmond Memorial Hosp.♦△	Gen	NPAssn	100	69	18	849	2,186
St. Vincent's Hospital♦♦△	Gen	Church	211	202	35	1,527	6,517
Seaside Hospital of St. John's Guild	Unit of Hospital for Special Surgery, New York City						
Sea View Hospital♦♦△	TB	City	1,996	1,411	12	1	1,602
Staten Island Hospital♦♦△	Gen	NPAssn	217	155	62	1,917	5,985
Station Hospital	Gen	Army	416	194	..	...	2,686
Veterans Admin. Hospital♦△	Gen	Vet	1,000	...	..	Estab. 1947	
Suffern, 2,776—Rockland							
Good Samaritan Hospital△	Gen	Church	92	72	32	1,003	3,844
Summount, 50—Franklin							
Veterans Admin. Hospital△	TB	Vet	573	479	..	...	880
Syracuse, 206,967—Onondaga							
City Hospital△	Iso	City	75	30	..	...	975
Crouse-Irving Hospital♦♦△	Gen	NPAssn	220	248	39	2,281	7,502
General Hospital♦♦△	Gen	NPAssn	127	114	43	1,503	4,642
Hospital of the Good Shepherd♦♦△	Gen	NPAssn	196	158	..	...	4,458
Onondaga General Hospital	Gen	NPAssn	75	41	10	108	1,223
Onondaga Sanatorium△	TB	County	229	206	..	...	246
Peoples Hospital	Gen	NPAssn	26	18	5	42	544
St. Joseph Hospital♦△	Gen	Church	207	171	43	1,013	6,052
St. Mary's Maternity Hospital and Children's Home	Mat	Church	39	20	29	632	774
Syracuse Memorial Hosp.♦♦△	Gen	NPAssn	276	274	60	2,417	11,217
Syracuse Psychopathic Hospital♦♦△	Ment	State	60	57	..	...	681
Twin Elms	N&M	Part	18	15	..	...	149
Tarrytown, 6,874—Westchester							
Tarrytown Hospital△	Gen	NPAssn	57	33	13	309	1,555
Thiells, 700—Rockland							
Letchworth Village	MeDe	State	3,792	4,145	6	14	406
Ticonderoga, 3,402—Essex							
Moses-Ludington Hospital△	Gen	NPAssn	47	36	6	282	1,281
Troy, 70,304—Rensselaer							
Leonard Hospital△	Gen	NPAssn	135	112	28	1,025	3,842
Marshall Sanitarium	N&M	NPAssn	60	38	..	...	214
Price Memorial Hospital	Unit of Samaritan Hospital						
St. Joseph's Maternity Hosp.	Mat	Church	32	16	24	480	585
Samaritan Hospital♦♦△	Gen	NPAssn	177	153	35	1,338	4,367
Troy Hospital♦△	Gen	Church	244	179	28	745	5,725
Trudeau, 600—Essex							
Trudeau Sanatorium♦△	TB	NPAssn	200	182	..	...	179
Tupper Lake, 5,451—Franklin							
Mercy General Hospital	Gen	Church	35	30	11	183	836
Tuxedo Park, 2,500—Orange							
Tuxedo Memorial Hospital	Gen	NPAssn	33	18	7	124	674
Utica, 100,518—Oneida							
Broadacres Sanatorium Oneida County Sanatorium△	TB	County	182	110	..	...	144
Children's Hospital Home△	Orth	NPAssn	40	36	..	...	135
Faxton Hospital△	Gen	NPAssn	128	97	27	987	4,357
Masonic Soldiers and Sailors Memorial Hospital	Gen	NPAssn	170	123	..	...	241
Oneida County Hospital	Gen	County	128	44	14	110	2,204
St. Elizabeth Hospital△	Gen	Church	178	170	37	1,180	7,208
St. Luke's Home and Hosp.△	Gen	Church	123	80	99	924	3,502
Utica Memorial Hospital△	Gen	NPAssn	81	76	25	567	3,491
Utica State Hospital♦△	Ment	State	1,823	1,766	..	...	521
Valhalla, 2,800—Westchester							
Grasslands Hospital♦♦△	Gen	County	600	466	15	208	4,470
Warsaw, 3,534—Wyoming							
Wyoming County Community Hospital♦△	Gen	StateCo	122	98	20	560	2,803
Warwick, 2,524—Orange							
St. Anthony's Hospital△	Gen	Church	50	22	13	145	606
Waterloo, 4,010—Seneca							
Waterloo Memorial Hospital	Gen	NPAssn	26	25	9	185	846

NEW YORK—Continued

Hospitals and Sanatoriums	Type of Service	Ownership or Control	Beds	Average Census †	Bassinets	Number of Births	Admissions †
Watertown, 33,385—Jefferson							
House of the Good Samaritan♦△	Gen	NPAssn	160	133	32	1,017	4,722
Jefferson County Sanat.♦△	TB	County	78	61	..	...	361
Mercy Hospital♦△	Gen	Church	157	114	23	680	4,820
Waverly, 5,420—Tioga							
Tioga County General Hosp.△	Gen	NPAssn	70	64	15	447	2,244
Wayland, 1,795—Steuben							
Wayland Hospital	Gen	Indiv	18	12	4	157	706
Wellsville, 5,942—Allegany							
Memorial Hospital of Wm. F. and Gertrude F. Jones	Gen	City	55	44	10	327	2,003
West Brentwood,—Suffolk							
Pilgrim State Hospital♦△	Ment	State	9,000	9,061	..	...	1,020
Westfield, 3,434—Chautauqua							
Westfield Memorial Hospital	Gen	NPAssn	24	17	10	285	839
West Haverstraw, 2,933—Rockland							
Rehabilitation Hospital♦△	Orth	State	250	204	..	...	249
West Point,—Orange							
Station Hospital△	Gen	Army	253	104	14	104	4,073
White Plains, 40,327—Westchester							
Burke Convalescent Home	Conv	NPAssn	244	198	..	...	3,451
New York Hospital—Westchester Division♦△	N&M	NPAssn	301	268	..	...	281
St. Agnes Hospital♦△	Gen	Church	138	100	39	762	3,304
White Plains Hospital♦♦△	Gen	NPAssn	180	141	30	854	6,126
Willard, 600—Seneca							
Willard State Hospital♦△	Ment	State	3,000	2,930	..	...	452
Wingdale, 500—Dutchess							
Harlem Valley State Hosp.♦△	Ment	State	4,686	4,397	..	...	533
Woodhaven, Queens—See St. Anthony's Hospital△	TB	Church	380	363	..	...	510
Wynantskill, 300—Rensselaer							
Pawling Sanatorium	TB	County	118	83	..	...	76
Yaphank, 350—Suffolk							
Suffolk Home and Infirmary	Chr	County	203	197	..	...	316
Yonkers, 142,598—Westchester							
Gray Oaks Hospital	TB	City	45	36	..	...	49
House of Rest at Spain Ridge	TB	NPAssn	76	64	..	...	107
St. John's Riverside Hosp.♦△	Gen	NPAssn	188	160	32	1,168	5,969
St. Joseph's Hospital♦△	Gen	Church	168	137	25	674	4,111
Yonkers General Hospital♦△	Gen	NPAssn	143	118	34	955	5,287
Yonkers Professional Hosp.	Gen	Corp	104	94	36	722	3,756

Related Institutions

Albany, 130,577—Albany							
Albany's Hospital for Incurables	Incur	NPAssn	100	99	..	...	44
St. Margaret's House and Hospital	Inst	NPAssn	55	42	..	...	46
Albion, 4,602—Orleans							
Albion State Training School	MeDe	State	400	259	..	...	87
Orleans County Hospital	InstGen	County	32	14	..	...	50
Alden, 954—Erie							
Erie County Penitentiary Hospital	Inst	County	27	9	..	...	83
Alexandria Bay, 1,746—Jefferson							
Noble Foundation Hospital	Gen	City	13	11	3	122	434
Bainbridge, 1,450—Chenango							
Bainbridge Hospital	Gen	Indiv	14	5	6	42	166
Bedford Hills, 2,000—Westchester							
Westfield State Farm	Inst	State	48	47	..	...	1,139
Binghamton, 78,809—Broome							
Binghamton Training School	MeDe	Indiv	55	51	..	...	7
Brooklyn, 2,698,285—Kings							
Esplanade Private Home for Chronics and Convalescents	ConvChr	Part	46	45	..	...	102
Menorah Hospital and Home for Aged and Infirm	Chr	NPAssn	150	48	..	...	50
Buffalo, 575,901—Erie							
Ingleside Home and Hosp.	Mat	NPAssn	10	...	20	172	228
Eastview, 1,000—Westchester							
Solomon and Betty Lum Memorial Home for Convalescents	Conv	NPAssn	108	80	..	...	1,205
Elmira, 45,166—Chemung							
Elmira Reformatory Hospital	Inst	State	97	15	..	...	1,033
Far Rockaway,—Queens							
Wave Crest Convalescent Home	OrthChil	NPAssn	50	50	..	...	146
Hawthorne, 2,000—Westchester							
Rosary Hill Home	Cancer	Church	100	83	..	...	271
Industry, 250—Monroe							
Hospital of State Agriculture and Industrial School	Inst	State	50	17	..	...	1,029
Iroquois, 40—Erie							
Thomas Indian School Hosp.	Inst	State	40	9	..	...	504
Ithaca, 19,730—Tompkins							
Reconstruction Home	Orth	NPAssn	100	66	..	...	97
Johnson City, 15,029—Broome							
Springer Private Hospital	Mat	Indiv	23	16	14	198	370
Keene Valley, 511—Essex							
Keene Valley Neighborhood House and Hospital	Gen	NPAssn	11	6	8	99	179
Lake Ronkonkoma, 1,000—Suffolk							
Gary de Vabre Academy	MeDe	Indiv	18	15	..	...	37
Millbrook, 1,340—Dutchess							
Cardinal Hayes Memorial Convalescent Home	Chil	Church	75	66	..	...	491
Mount McGregor, 350—Saratoga							
New York State Veterans' Camp	Conv	State	450	237	..	...	2,651

Key to symbols and abbreviations is on page 1396

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NEW YORK—Continued

Related Institutions	Type of Service	Ownership or Control	Beds	Average Census †	Bassinets	Number of Births	Admissions †
Napanoch, 720—Ulster							
Institution for Male Defective Delinquents	MeDe	State	28	11	..	...	592
Newark, 9,046—Wayne							
Newark State School	MeDe	State	2,722	2,200	..	...	261
New York City, 4,582,220—New York							
Beth Abraham Home for Incurables	Incur	NPAssn	318	315	..	...	67
Hebrew Convalescent Home	Conv	NPAssn	80	70	..	...	609
Home and Hospital of the Daughters of Israel	Inst	NPAssn	129	120	..	...	281
Home for Dependents	Inst	City	1,853	1,200	..	...	944
House of Calvary	Cancer	Church	146	109	..	...	467
House of the Holy Comforter	Chr	Church	91	67	..	...	23
Jacob Siegel Memorial Hosp.	Unit of Home and Hospital of the Daughters of Israel						
National Hospital for Speech Disorders	Speech	NPAssn	..	229	..	...	3,913
St. Andrew's Convalescent Hospital	Conv	Church	21	14	..	...	167
St. Mary's Hospital for Children	Conv	Church	60	54	..	...	480
St. Rose's Free Home for Incurable Cancer	Cancer	Church	91	81	..	...	235
Niagara Falls, 78,029—Niagara							
Niagara Falls Municipal Hosp.	Iso	City	36	12	..	...	145
Oceanside (Rockville Centre P.O.), 500—Nassau							
Oceanside Gardens Sanitarium	N&M	Corp	19	19	..	...	75
Ogdensburg, 16,346—St. Lawrence							
St. John's Hospital	Conv	Church	35	29	..	...	59
Onondaga, 325—Onondaga							
Onondaga County Hospital	Inst	County	230	217	..	...	463
Oxford, 1,713—Chenango							
New York State Woman's Relief Corps Home	Inst	State	71	68	..	...	167
Pelham, 1,918—Westchester							
Pelham Home for Children	Card	NPAssn	25	16	..	...	28
Pleasantville, 4,454—Westchester							
Pleasantville Cottage School	Inst	NPAssn	24	5	..	...	341
Poughkeepsie, 40,478—Dutchess							
Baldwin House (Vassar College Infirmary)	Inst	NPAssn	35	10	..	...	1,242
Poughkeepsie City Home Infirmary	Inst	City	54	42	..	...	75
Queens Village, —Queens							
Queens Village Sanatorium	Mat	Indiv	8	4	7	288	288
Rochester, 324,975—Monroe							
Convalescent Hospital for Children	Conv	NPAssn	52	34	..	...	82
Field Sanitarium	Conv	Indiv	27	10	..	...	18
Knorr Sanitarium	Conv	Indiv	28	25	..	...	28
Rye, 9,865—Westchester							
Blakyon Rest Sanitarium	N&M	Indiv	52	48	..	...	209
Saranac Lake, 7,158—Franklin							
Franklin Manor	TB	Indiv	14	10	..	...	90
Owens Private Sanatorium	TB	Indiv	18	16	..	...	25
Schenectady, 87,549—Schenectady							
Bellevue Maternity Home	Mat	Indiv	50	44	54	1,432	1,432
Schenectady City Hospital	Iso	City	35	18	..	...	719
Schenectady County Home and Hospital	Inst	County	67	58	..	...	714
Springville, 5,542—Erie							
Bertrand Chaffee Hospital	Gen	NPAssn	25	..	8	...	...
Staten Island, 174,441—Richmond							
New York City Farm Colony	Inst	City	1,302	1,046	..	...	316
Sailors' Snug Harbor Hosp.	Gen	NPAssn	105	92	..	...	304
State School, —Orange							
Hospital of New York State Training School for Boys	Inst	State	25	6	..	...	621
Syracuse, 205,967—Onondaga							
Syracuse State School	MeDe	State	1,183	973	..	...	125
Tupper Lake, 5,451—Franklin							
American Legion Mountain Camp	Conv	NPAssn	54	28	..	...	116
Valhalla, 8,288—Westchester							
Blythedale Hospital and Home for Crippled Children	Orth	NPAssn	70	55	..	...	68
Wallkill, 800—Ulster							
Wallkill State Prison Hosp.	Inst	State	19	3	..	...	260
Wassaic, 350—Dutchess							
Wassaic State School	MeDe	State	4,387	4,442	7	8	389
Williamsville, 5,614—Erie							
Josephine Goodyear Convalescent Home	Chil	NPAssn	60	50	..	...	168
Woodbourne, 300—Sullivan							
Woodbourne Institution for Defective Delinquents	MeDe	State	726	617	..	...	90
Yonkers, 142,598—Westchester							
Yonkers City Hospital for Communicable Disease	Iso	City	67	4	..	...	85

NORTH CAROLINA

Hospitals and Sanatoriums	Type of Service	Ownership or Control	Beds	Average Census †	Bassinets	Number of Births	Admissions †
Asheville, 51,310—Buncombe							
Appalachian Hall	N&M	Corp	175	104	..	...	1,248
Asheville Colored Hospital	Gen	NPAssn	37	18	8	179	629
Asheville Mission Hospital◇	Gen	NPAssn	120	93	15	752	3,961
Aston Park Hospital	Gen	NPAssn	45	40	..	...	1,831
Biltmore Hospital◇	Gen	NPAssn	55	50	16	476	1,908
Highland Hospital	N&M	NPAssn	105	83	..	...	213
Norburn Hospital	Gen	NPAssn	128	66	18	265	2,387
St. Joseph's Hospital◇	Gen	Church	117	85	38	1,347	4,270
Zephyr Hill Sanatorium	TB	Indiv	20	20	..	...	18
Banner Elk, 345—Avery							
Grace Hospital◇	Gen	Church	60	40	15	348	2,200
Black Mountain, 1,042—Buncombe							
Fellowship Sanatorium of the Royal Legion	TB	NPAssn	18	9	..	...	10
Western North Carolina Sanatorium◇	TB	State	300	275	..	...	326
Brevard, 3,061—Transylvania							
Transylvania Community Hospital	Gen	NPAssn	25	14	6	288	871
Burlington, 21,638—Alamance							
Alamance County Sanatorium	TB	County	30	24	..	...	27
Alamance General Hospital	Gen	NPAssn	49	39	6	35	1,995
Camp Lejeune, —							
U. S. Naval Hospital◇	Gen	Navy	340	219	40	626	3,430
Charlotte, 100,899—Mecklenburg							
Charlotte Eye, Ear and Throat Hospital	ENT	Part	22	19	..	...	2,675
Charlotte Memorial Hosp.◇	Gen	NPAssn	371	314	32	1,078	10,101
Good Samaritan Hospital◇	Gen	Church	90	88	20	1,100	3,741
Mercy Hospital◇	Gen	Church	105	106	50	1,730	6,218
Presbyterian Hospital◇	Gen	Church	251	226	33	1,450	7,200
Western Medical Center	Ven	State	200	177	..	...	4,657
Cherokee, 500—Swain							
Eastern Cherokee Indian Hospital	Gen	IA	28	16	7	135	739
Cherry Point, —Craven							
U. S. Marine Corps Air Station Dispensary	Gen	Navy	326	43	14	243	2,409
Columbia, 1,600—Tyrrell							
Columbia Hospital	Gen	Indiv	23	8	7	102	864
Concord, 15,572—Cabarrus							
Cabarrus County Hospital◇	Gen	County	165	143	60	1,556	8,226
Crossnore, 200—Avery							
Garrett Memorial Hospital	Gen	NPAssn	20	10	6	108	530
Durham, 60,196—Durham							
Duke Hospital◇◇	Gen	NPAssn	540	429	55	1,543	13,571
Durham County Tuberculosis Sanatorium	TB	County	50	50	..	...	32
Eastern Medical Center	Ven	State	204	144	..	...	4,531
Lincoln Hospital◇	Gen	NPAssn	100	91	22	449	2,849
McPherson Hospital	ENT	Indiv	30	17	..	...	1,507
Watts Hospital◇◇	Gen	NPAssn	200	198	25	1,602	9,980
Elizabeth City, 11,564—Pasquotank							
Albemarle Hospital	Gen	CyCo	80	44	14	165	1,389
Elkin, 2,734—Surry							
Hugh Chatham Memorial Hospital	Gen	Church	60	51	19	578	2,530
Fairmont, 1,966—Robeson							
Weinstein Clinic Hospital	Gen	Indiv	25	9	7	44	224
Fayetteville, 17,428—Cumberland							
Cumberland County Tuberculosis Sanatorium	TB	County	32	28	..	...	61
Highsmith Hospital	Gen	NPAssn	120	122	5	674	5,849
H. L. Pittman Hospital	Gen	NPAssn	75	63	30	600	3,417
Veterans Admin. Hospital	Gen	Vet	321	266	..	...	3,779
Fletcher, 300—Henderson							
Mountain Sanitarium and Hospital◇	Gen	Church	60	51	10	130	1,395
Fort Bragg, —Cumberland							
Station Hospital◇	Gen	Army	2,200	665	16	650	12,746
Franklin, 1,240—Macon							
Angel Clinic Hospital	Gen	Indiv	30	22	2	56	900
Angel Hospital	Gen	NPAssn	56	22	8	160	1,371
Gastonia, 21,313—Gaston							
Garrison General Hospital	Gen	NPAssn	50	44	18	900	2,426
Gaston County Hosp.	Gen	County	21	20	4	147	419
Gaston Memorial Hospital◇	Gen	NPAssn	65	44	16	712	2,913
North Carolina Orthopedic Hospital◇◇	Orth	State	100	153	..	...	428
Goldsboro, 17,274—Wayne							
Goldsboro Hospital◇	Gen	NPAssn	126	84	24	922	4,753
State Hospital	Ment	State	2,000	2,614	..	...	630
Greensboro, 59,319—Guilford							
Piedmont Memorial Hosp.	Gen	NPAssn	61	40	17	319	2,578
L. Richardson Memorial Hospital◇	Gen	NPAssn	60	40	8	629	2,723
St. Leo's Hospital◇	Gen	Church	86	76	24	1,105	3,976
Sternberger Hospital for Women and Children◇◇	Gen	NPAssn	40	33	13	353	2,279
Wesley Long Hospital	Gen	NPAssn	100	90	30	702	4,322
Greenville, 12,674—Pitt							
Pitt General Hospital	Gen	NPAssn	65	40	11	436	2,915
Hamlet, 8,111—Richmond							
Hamlet Hospital◇	Gen	NPAssn	50	No data supplied			
Henderson, 7,647—Vance							
Jubilee Hospital	Gen	Church	37	29	5	160	1,297
Maria Parham Hospital◇	Gen	NPAssn	61	52	17	513	2,804
Hendersonville, 5,261—Henderson							
Patton Memorial Hospital	Gen	NPAssn	47	39	18	613	2,950
Hickory, 13,627—Catawba							
Hickory Memorial Hospital◇	Gen	NPAssn	57	18	12	760	1,437
Richard Baker Hospital◇	Gen	Indiv	80	42	24	886	2,909

Key to symbols and abbreviations is on page 1388

NORTH CAROLINA—Continued

Hospitals and Sanatoriums	Type of Service	Ownership or Control	Beds	Average Census †	Bassinets	Number of Births	Admissions †
High Point, 28,495—Guilford							
High Point Memorial Hosp.ΔΦ	Gen	NPAssn	122	107	56	1,710	7,564
Huntersville, 763—Mecklenburg							
Mecklenburg Sanatorium Δ	TB	County	160	113	..	...	197
Jacksonville, 873—Onslow							
Onslow County Hospital	Gen	County	50	28	17	481	2,125
Jamestown, 900—Guilford							
Guilford County Sanatorium Δ	TB	County	126	94	..	...	143
Jefferson, 304—Ashe							
Ashe County Memorial Hosp.	Gen	NPAssn	31	20	12	472	1,406
Kinston, 15,388—Lenoir							
Memorial General HospitalΔΦ	Gen	NPAssn	73	62	12	747	3,240
Parrott Memorial Hospital	Gen	NPAssn	59	45	15	574	3,167
Laurinburg, 5,685—Scotland							
Scotland County Memorial Hospital	Gen	NPAssn	75	40	12	313	2,152
Leaksville, 1,886—Rockingham							
Leaksville General Hosp.Δ	Gen	NPAssn	45	35	5	423	2,228
Lenoir, 7,598—Caldwell							
Blackwelder HospitalΔ	Gen	NPAssn	30	24	10	581	1,828
Dula Hospital	Gen	Indiv	25	18	5	108	872
Lenoir HospitalΔ	Gen	Corp	35	30	8	315	1,400
Lexington, 10,250—Davidson							
Lexington Memorial Hospital	Gen	NPAssn	80	38	30	777	3,015
Lincolnton, 4,325—Lincoln							
Gordon Crowell Memorial HospitalΔ	Gen	Corp	58	30	14	416	1,724
Reese Hamble Hospital	Gen	NPAssn	35	18	11	310	1,783
Lumberton, 5,402—Robeson							
Baker-Thompson Memorial HospitalΦ	Gen	NPAssn	175	126	38	1,250	7,368
Marion, 2,880—McDowell							
Marion General Hospital	Gen	NPAssn	42	41	18	659	2,593
McCain,—Hoke							
North Carolina Sanatorium for the Treatment of Tuberculosis ΔΦ	TB	State	600	573	..	...	709
Monroe, 6,475—Union							
Ellen Fitzgerald HospitalΔ	Gen	NPAssn	60	45	14	816	3,590
Mooresville, 6,582—Iredell							
Lowrance HospitalΔ	Gen	NPAssn	78	51	15	675	2,600
Morehead City, 3,695—Carteret							
Morehead City Hospital	Gen	City	56	33	18	522	1,862
Morganton, 7,670—Burke							
Broadoaks Sanatorium	N&M	Part	75	48	..	...	65
Grace HospitalΔΦ	Gen	NPAssn	100	75	17	712	4,000
State Hospital	Ment	State	2,750	2,601	..	...	457
Mount Airy, 6,286—Surry							
Martin Memorial HospitalΔΦ	Gen	NPAssn	75	72	15	631	3,361
Murphy, 1,673—Cherokee							
Petrie Hospital	Gen	NPAssn	25	22	12	249	805
Nashville, 1,171—Nash							
Nash County Tuberculosis Sanatorium	TB	County	33	30	..	...	52
New Bern, 11,815—Craven							
Good Shephard Hospital	Gen	Church	58	30	8	122	703
St. Luke's Hospital	Gen	Church	64	31	20	549	1,901
Newton, 5,687—Catawba							
Catawba Hospital	Gen	NPAssn	100	60	12	821	2,183
North Wilkesboro, 4,473—Wilkes							
Wilkes HospitalΔ	Gen	NPAssn	58	37	16	648	2,415
Otten, 1,500—Buncombe							
Veterans Admin. HospitalΔΦ	TB	Vet	1,506	1,394	..	...	4,202
Oxford, 5,901—Granville							
Granville Hospital	Gen	NPAssn	35	27	10	257	1,644
Susie Clayton Cheatham Memorial Hospital	Gen	NPAssn	19	13	1	106	679
Pinebluff, 339—Moore							
Pine Bluff Sanitarium	N&M	Corp	40	36	..	...	245
Pinehurst, 1,600—Moore							
Medical Center Hospital	Gen	Part	19	...	4	Estab. 1947	
Moore County HospitalΔ	Gen	NPAssn	80	66	20	747	3,147
Raleigh, 46,897—Wake							
Central Prison Hospital	Inst	State	134	57	..	...	1,232
Mary Elizabeth HospitalΦ	Gen	Corp	48	46	10	496	3,071
Rex HospitalΔΦ	Gen	NPAssn	294	258	40	1,665	10,998
Royster Medical Center	Unit of State Hospital						
St. Agnes HospitalΔΦ	Gen	Church	114	78	20	397	2,531
State HospitalΔ	Ment	State	2,523	2,374	..	...	883
Wake County Tuberculosis Sanatorium	TB	CyCo	58	50	..	...	60
Reidsville, 10,397—Rockingham							
Annie Penn Memorial Hosp.	Gen	NPAssn	74	60	12	584	3,700
Roanoke Rapids, 8,545—Halifax							
Roanoke Rapids HospitalΦ	Gen	NPAssn	102	114	22	877	5,806
Rocky Mount, 25,568—Nash							
Atlantic Coast Line Hosp.Δ	Indus	NPAssn	50	35	..	...	932
Park View HospitalΔΦ	Gen	NPAssn	110	80	20	548	5,657
Rocky Mount SanitariumΔΦ	Gen	NPAssn	77	55	11	562	2,967
Speight Stone Bell Clinic and Hospital	Gen	Part	19	15	10	251	1,057
Roseboro, 929—Sampson							
Brewer-Starling Clinic Hosp.	Gen	Part	9	6	5	309	486
Roxboro, 4,598—Person							
Community Hospital	Gen	NPAssn	25	23	6	364	1,090
Rutherfordton, 2,736—Rutherford							
Rutherford HospitalΔΦ	Gen	NPAssn	53	44	11	532	2,817
Salisbury, 19,607—Rowan							
Rowan Memorial HospitalΔΦ	Gen	NPAssn	120	110	40	1,262	5,856
Sanford, 4,566—Lee							
Lee County HospitalΔ	Gen	County	50	47	12	869	4,143
Shelby, 14,637—Cleveland							
Shelby HospitalΔΦ	Gen	County	91	85	26	926	5,572

NORTH CAROLINA—Continued

Hospitals and Sanatoriums	Type of Service	Ownership or Control	Beds	Average Census †	Bassinets	Number of Births	Admissions †
Siler City, 2,197—Chatham							
Chatham Hospital	Gen	NPAssn	18	10	6	228	720
Smithfield, 3,678—Johnston							
Johnston County HospitalΔ	Gen	NPAssn	35	28	10	465	1,945
Southport, 1,720—Brunswick							
J. Arthur Dosher Memorial Hospital	Gen	CyCo	50	28	7	163	1,292
Statesville, 11,440—Iredell							
Davis HospitalΔΦ	Gen	NPAssn	130	109	22	698	4,471
H. F. Long HospitalΔΦ	Gen	NPAssn	68	57	14	547	2,947
Swannanoa, 2,500—Buncombe							
Veterans Admin. Hospital	Unit of Veterans Admin. Hosp., Oteen, N.C.						
Sylva, 1,409—Jackson							
C. J. Harris Community Hospital	Gen	NPAssn	25	22	10	355	905
Tarboro, 7,148—Edgecombe							
Bass Memorial Hospital	Gen	Indiv	9	4	5	31	125
Edgecombe General HospitalΔ	Gen	NPAssn	46	44	20	289	2,169
Thomasville, 11,041—Davidson							
City Memorial Hospital	Gen	NPAssn	52	33	18	458	1,879
Tryon, 2,043—Polk							
St. Luke's Hospital	Gen	NPAssn	28	18	6	217	1,059
Valdese, 2,615—Burke							
Valdese General Hospital	Gen	NPAssn	49	35	12	314	2,551
Wadesboro, 3,587—Anson							
Anson Sanatorium	Gen	NPAssn	40	30	10	248	1,260
Washington, 8,569—Beaufort							
Fowle Memorial Hospital	Gen	Indiv	16	12	6	162	564
Tayloe HospitalΔΦ	Gen	NPAssn	75	62	12	655	4,127
Waynesville, 2,940—Haywood							
Haywood County Hospital	Gen	County	72	47	15	1,001	2,735
Whiteville, 3,031—Columbus							
Columbus County Hospital	Gen	NPAssn	62	54	17	684	3,106
Williamston, 3,905—Martin							
Brown Community Hospital	Gen	Indiv	35	18	7	102	846
Wilmington, 33,407—New Hanover							
Babies HospitalΔΦ	Chil	NPAssn	40	23	10	...	1,414
Bulluck Hospital Clinic	Gen	NPAssn	25	19	..	...	936
Community HospitalΦ	Gen	CyCo	96	56	22	545	1,982
James Walker Memorial HospitalΔΦ◇	Gen	NPAssn	300	202	50	1,779	8,827
Wilson, 19,234—Wilson							
Carolina General HospitalΔΦ	Gen	NPAssn	54	43	15	594	2,278
Eastern North Carolina Sanatorium	TB	State	150	181	..	...	170
Mercy Hospital	Gen	NPAssn	30	21	9	149	564
Wilson County Tuberculosis Sanatorium	TB	County	40	29	..	...	43
Woodard-Herring HospitalΔΦ	Gen	NPAssn	50	55	10	302	2,721
Winston-Salem, 79,815—Forsyth							
City Memorial Hosp.ΔΦ◇	Gen	City	183	160	40	1,721	6,611
Forsyth County Hospital	Gen	County	36	18	6	88	453
Forsyth County SanatoriumΔ	TB	County	122	90	..	...	92
Kate Bitting Reynolds Memorial HospitalΔΦ◇	Gen	City	205	140	19	925	5,389
North Carolina Baptist HospitalΔΦ◇	Gen	Church	280	220	50	1,168	7,321

Related Institutions

Asheville, 51,310—Buncombe							
Asheville Orthopedic Home	Orth	NPAssn	28	30	..	...	184
Violet Hill Sanatorium	TB	Indiv	27	34	..	...	29
Candler, 60—Buncombe							
Pisgah Sanitarium and Hosp.	Gen	Church	30	20	..	...	202
Charlotte, 100,899—Mecklenburg							
Florence Crittenton Home	Mat	NPAssn	50	31	18	91	143
Davidson, 1,550—Mecklenburg							
Davidson College Infirmary	Inst	NPAssn	25	4	..	...	177
Henderson, 7,867—Vance							
Scott Parker Sanatorium	TB	County	14	11	..	...	12
Kinston, 15,286—Lenoir							
Caswell Training School	MeDe	State	880	850	..	...	41
Raleigh, 46,897—Wake							
Clark Hall Hospital	Inst	State	50	6	..	...	809
McCauley Private Hosp.	Gen	Indiv	10	5	3	62	224
Tarboro, 7,148—Edgecombe							
Edgecombe County Tuberculosis Sanatorium	TB	County	27	25	..	...	34
Winston-Salem, 79,815—Forsyth							
Casstevens Clinic Hospital	Gen	Indiv	17	7	5	175	488

NORTH DAKOTA

Hospitals and Sanatoriums	Type of Service	Ownership or Control	Beds	Average Census †	Bassinets	Number of Births	Admissions †
Belcourt, 200—Rolette							
Turtle Mountain Hospital	Gen	IA	42	27	10	169	1,089
Bismarck, 13,466—Burleigh							
Bismarck Evangelical HospitalΔΦ◇	Gen	Church	154	136	25	330	4,549
St. Alexius HospitalΔΦ◇	Gen	Church	160	184	31	1,020	7,617
Bottineau, 1,739—Bottineau							
St. Andrew's HospitalΦ	Gen	Church	60	54	15	153	1,888
Carrington, 1,856—Foster							
Carrington Hospital	Gen	Church	25	17	5	126	699
Crosby, 1,404—Divide							
St. Luke's Hospital	Gen	Church	20	9	5	130	611
Devils Lake, 6,384—Ramsey							
General HospitalΔ	Gen	NPAssn	46	19	9	135	654
Mercy HospitalΔΦ	Gen	Church	75	47	25	477	2,261
Dickinson, 5,829—Stark							
St. Joseph's HospitalΔ	Gen	Church	80	65	25	624	3,519

Key to symbols and abbreviations is on page 1396

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NORTH DAKOTA—Continued

Hospitals and Sanatoriums	Type of Service	Ownership or Control	Beds	Average Census †	Bassinets	Number of Births	Admissions †
Drayton, 688—Pembina							
Drayton Hospital	Gen	Indiv	13	10	5	73	373
Ebenezer, 175—McLean							
Fort Berthold Indian Hosp.	Gen	IA	18	10	6	57	513
Fargo, 32,580—Cass							
St. John's Hospital◆▲○	Gen	Church	180	156	35	1,460	6,175
St. Luke's Hospital◆▲○	Gen	Church	127	127	20	876	6,068
Veterans Admin. Center▲	Gen	Vet	292	180	..	....	2,234
Fort Totten, 105—Benson							
Fort Totten Indian Hospital	Gen	IA	31	14	4	47	701
Fort Yates, 1,800—Sioux							
Standing Rock Indian Hosp.	Gen	IA	47	25	5	45	618
Grafton, 4,070—Walsh							
Grafton Deaconess Hospital	Gen	Church	60	38	12	605	2,614
Grand Forks, 30,229—Grand Forks							
Grand Forks Deaconess Hospital◆▲○	Gen	NPAssn	140	117	25	765	4,029
St. Michael's Hospital▲○	Gen	Church	77	67	20	642	3,085
Harvey, 1,851—Wells							
St. Aloisius Hospital	Gen	Church	50	27	12	249	1,171
Jamestown, 8,750—Stutsman							
Jamestown Hospital▲	Gen	NPAssn	74	54	12	295	2,180
State Hospital for the Insane▲	Ment	State	2,026	2,029	..	....	424
Trinity Hospital▲○	Gen	Church	100	79	18	482	2,922
Kenmare, 1,325—Ward							
Kenmare Deaconess Hospital	Gen	Church	33	21	10	190	1,021
Langdon, 1,540—Cavalier							
Mercy Hospital	Gen	Church	45	30	15	342	1,235
Mandan, 6,605—Morton							
Mandan Deaconess Hospital	Gen	Church	36	18	10	275	1,166
Mayville, 1,331—Traill							
Union Hospital	Gen	NPAssn	18	12	7	150	642
Minot, 16,577—Ward							
St. Joseph's Hospital▲○	Gen	Church	135	123	19	514	4,737
Trinity Hospital◆▲○	Gen	Church	188	171	32	983	6,232
New Rockford, 2,017—Eddy							
City Hospital	Gen	Church	41	25	9	184	1,166
Northwood, 1,063—Grand Forks							
Northwood Deaconess Hosp.	Gen	Church	25	16	6	129	584
Oakes, 1,665—Dickey							
Mercy Hospital	Gen	Church	15	10	7	183	476
Rolette, 600—Rolette							
Community Hospital	Gen	NPAssn	20	12	7	76	508
Rolla, 1,200—Rolette							
Rolla Community Hospital	Gen	City	26	18	7	143	1,304
Rugby, 2,215—Pierce							
Good Samaritan Hospital▲	Gen	Church	70	63	15	370	2,981
San Haven,—Rolette							
North Dakota State Tuberculosis Sanatorium▲	TB	State	350	234	..	....	263
Sharon, 371—Steele							
Sharon Community Hospital	Gen	City	15	9	5	82	568
Valley City, 5,017—Barnes							
Mercy Hospital○	Gen	Church	100	74	15	571	3,365
Wahpeton, 3,747—Richland							
St. Mary Hospital	Gen	Church	23	22	6	134	519
Williston, 3,700—Williams							
Good Samaritan Hospital▲	Gen	NPAssn	40	40	12	329	960
Mercy Hospital▲	Gen	Church	75	54	20	600	5,434
Related Institutions							
Elgin, 883—Grant							
Elgin Hospital	Gen	Indiv	20	15	7	186	913
Fargo, 32,580—Cass							
Cass County Hospital	Gen	County	40	18	3	13	247
City Detention Hospital	Iso	City	8	4	6	....	66
Florence Crittenton Home	Mat	NPAssn	56	24	6	71	90
Grafton, 4,070—Walsh							
Grafton State School	MrDe	State	1,040	958	..	....	51

OHIO

Hospitals and Sanatoriums	Type of Service	Ownership or Control	Beds	Average Census †	Bassinets	Number of Births	Admissions †
Akron, 244,791—Summit							
Children's Hospital◆▲○	Chil	NPAssn	140	132	..	....	5,816
City Hospital◆▲○	Gen	NPAssn	417	397	72	5,000	15,742
Edwin Shaw Sanatorium◆	TB	County	122	117	..	....	186
Peoples Hospital▲○	Gen	NPAssn	220	194	50	2,887	11,970
St. Thomas Hospital◆▲○	Gen	Church	305	173	30	2,255	8,871
Alliance, 22,465—Stark							
Alliance City Hospital○	Gen	City	98	92	22	1,120	3,829
Amherst, 2,866—Lorain							
Pleasant View Sanatorium	TB	County	81	72	..	....	81
Ashland, 12,433—Ashland							
Samaritan Hospital○	Gen	NPAssn	49	37	15	637	2,453
Ashtabula, 21,466—Ashtabula							
Ashtabula General Hospital	Gen	NPAssn	72	67	21	969	3,143
Athens, 7,696—Athens							
Athens State Hospital	Ment	State	1,816	1,784	..	....	419
Sheltering Arms Hospital	Gen	Indiv	52	36	9	576	1,859
Barberton, 34,628—Summit							
Citizens Hospital	Gen	NPAssn	78	52	30	1,309	3,174
Barnesville, 3,662—Belmont							
Barnesville Hospital	Gen	NPAssn	18	12	6	279	680
Bedford, 7,860—Cuyahoga							
Bedford Municipal Hospital	Gen	City	37	34	13	492	1,677
Bellaire, 13,710—Belmont							
City Hospital▲	Gen	NPAssn	45	32	5	488	1,951
Bellevue, 6,127—Huron							
Bellevue Hospital	Gen	NPAssn	41	23	11	343	886
Berea, 6,025—Cuyahoga							
Community Hospital▲	Gen	NPAssn	107	69	34	727	2,911

OHIO—Continued

Hospitals and Sanatoriums	Type of Service	Ownership or Control	Beds	Average Census †	Bassinets	Number of Births	Admissions †
Brecksville, 1,906—Cuyahoga							
Veterans Admin. Hospital◆▲	TB	Vet	200	150	..	....	376
Bryan, 5,404—Williams							
Cameron Hospital	Gen	NPAssn	16	14	5	254	745
Bucyrus, 9,727—Crawford							
Bucyrus City Hospital	Gen	City	51	36	14	691	1,875
Cambridge, 15,044—Guernsey							
Cambridge State Hospital	Ment	State	2,300	1,921	..	....	92
St. Francis Hospital	Gen	NPAssn	36	33	7	302	1,706
Swan Hospital	Gen	NPAssn	25	25	7	240	885
Canton, 108,401—Stark							
Aultman Hospital◆▲○	Gen	NPAssn	297	249	72	2,902	11,308
Little Flower Hospital	Unit of Mercy Hospital						
Mercy Hospital◆▲○	Gen	Church	227	201	45	2,282	8,345
Molly Stark Sanatorium	TB	County	125	120	..	....	135
Celina, 4,841—Mercer							
Gibbons Hospital	Gen	NPAssn	40	30	16	709	1,702
Otis Hospital	Gen	NPAssn	25	21	5	232	815
Chagrin Falls, 7,365—Cuyahoga							
Windsor Hospital▲	N&M	Corp	90	60	..	....	550
Chillicothe, 20,179—Ross							
Chillicothe Hospital▲	Gen	NPAssn	55	40	16	200	1,050
Federal Reformatory Hosp.▲	Inst	USPHS	70	52	..	....	1,121
Mount Logan Sanatorium	TB	Counties	60	51	..	....	83
Veterans Admin. Hospital▲	Ment	Vet	2,262	2,171	..	....	1,228
Cincinnati, 455,610—Hamilton							
Bethesda Hospital◆▲○	Gen	Church	218	209	60	3,040	8,626
Children's Hospital◆▲	Chil	Church	262	154	..	....	6,211
Christ Hospital◆▲○	Gen	Church	376	331	65	2,713	10,704
Christian R. Holmes Hosp▲	Gen	City	52	48	..	....	1,401
Cincinnati General Hosp.◆▲○	Gen	City	830	568	65	2,905	14,757
Cincinnati Sanitarium▲	N&M	Corp	100	97	..	....	615
Deaconess Hospital◆▲○	Gen	Church	168	139	30	1,035	4,508
Dunham Hospital◆▲	TB	County	501	404	..	....	444
Good Samaritan Hosp.◆▲○	Gen	Church	538	457	90	3,049	15,618
Hamilton County Home and Chronic Disease Hospital	Chr	County	265	259	..	....	510
Jewish Hospital◆▲○	Gen	NPAssn	300	246	60	2,551	9,233
Longview State Hospital◆▲	Ment	State	3,062	2,945	..	....	709
Ohio Hospital for Women and Children	Unit of Bethesda Hospital						
Our Lady of Mercy Hospital	Gen	Church	54	48	18	845	2,157
St. Mary's Hospital◆▲○	Gen	Church	200	134	30	802	5,265
Circleville, 7,982—Pickaway							
Berger Municipal Hospital	Gen	City	18	14	12	338	1,250
Cleveland, 878,336—Cuyahoga							
Babies and Childrens Hosp.	Unit of University Hospitals						
Booth Memorial Home and Hospital▲	Mat	Church	27	23	29	1,041	1,104
City Hospital◆▲○	Gen	City	1,079	864	56	1,630	14,470
City Psychopathic Hospital	Unit of City Hospital						
Cleveland Clinic Hospital▲	Gen	NPAssn	279	262	..	....	8,254
Cleveland State Hospital◆	Ment	State	2,832	2,673	..	....	1,062
Cleveland State Receiving Hospital◆	Ment	State	312	304	..	....	842
Evangelical Deaconess Hospital◆▲	Gen	Church	132	117	32	1,260	6,057
Fairview Park Hosp.◆▲○	Gen	Church	120	120	51	2,720	7,274
Glenville Hospital▲	Gen	NPAssn	114	91	30	1,217	4,523
Grace Hospital◆▲	Gen	NPAssn	64	50	12	485	2,464
Huron Road Hospital	See East Cleveland						
John H. Lowman Memorial Pavilion	Unit of City Hospital						
Lakeside Hospital	Unit of University Hospitals						
Leonard C. Hanna House	Unit of University Hospitals						
Lutheran Hospital◆▲○	Gen	Church	127	119	33	1,541	5,778
Maternity Hospital	Unit of University Hospitals						
Mount Sinai Hospital◆▲○	Gen	NPAssn	217	193	45	2,117	9,726
Polyclinic Hospital▲	Gen	NPAssn	120	91	34	1,136	5,232
St. Alexis Hospital◆▲○	Gen	Church	234	217	21	1,588	10,270
St. Ann's Maternity Hosp.◆▲	Mat	Church	43	39	43	2,474	2,551
St. John's Hospital◆▲○	Gen	Church	234	207	51	1,863	6,073
St. Luke's Hospital◆▲○	Gen	Church	257	277	65	2,675	12,713
St. Vincent Charity Hospital◆▲○	Gen	Church	200	205	..	....	6,338
U. S. Marine Hospital◆▲	Gen	USPHS	202	227	..	....	3,289
University Hospitals◆▲○	Gen	NPAssn	724	586	96	3,984	20,321
Veterans Admin. Hospital◆▲	Gen	Vet	1,000	769	..	....	7,349
Woman's Hospital◆▲	Gen	NPAssn	98	69	30	617	4,147
Cleveland Heights, 54,908—Cuyahoga							
Doctors' Hospital	Gen	NPAssn	110	35	30	....	1,388
Columbus, 306,087—Franklin							
Children's Hospital◆▲○	Chil	NPAssn	140	120	..	....	3,632
Columbus State Hospital◆▲	Ment	State	2,517	2,354	..	....	656
Franklin County Tuberculosis Hospital◆▲○	TB	County	235	220	..	....	284
Grant Hospital◆▲○	Gen	NPAssn	290	247	37	2,273	10,220
McMillen Sanitarium	N&M	Corp	40	29	..	....	227
Mercy Hospital▲	Gen	NPAssn	63	50	15	1,151	1,967
Mount Carmel Hospital◆▲○	Gen	Church	205	143	30	2,912	10,172
Ohio State University Hospital◆▲○	Gen	State	279	233	35	1,768	6,380
St. Ann's Maternity Hosp.◆▲	Mat	Church	30	28	30	1,491	1,651
St. Anthony Hospital	Gen	Church	207	181	..	....	2,500
St. Francis Hospital▲○	Gen	State	161	121	..	....	3,979
Station Hospital	Gen	Army	75	40	..	....	1,696
White Cross Hospital○	Gen	Church	206	209	62	3,270	10,760
Conneaut, 9,255—Ashtabula							
Brown Memorial Hospital	Gen	NPAssn	30	20	11	476	1,549
Coshocton, 11,509—Coshocton							
Coshocton Memorial Hospital	Gen	NPAssn	62	43	29	782	2,441
Crestline, 4,337—Crawford							
Crestline Emergency Hospital	Gen	NPAssn	20	9	6	119	580

Key to symbols and abbreviations is on page 1386

OHIO—Continued

Hospitals and Sanatoriums	Type of Service	Ownership or Control	Beds	Average Census †	Bassinets	Number of Births	Admissions †
Cuyahoga Falls, 20,546—Summit							
Summit County Receiving Hospital	Ment	State	65	42	..	...	284
Dayton, 210,718—Montgomery							
Dayton State Hospital♣	Ment	State	1,755	1,613	..	...	458
Good Samaritan Hospital♣♣○	Gen	Church	316	304	65	4,317	12,280
Miami Valley Hospital♣♣○	Gen	NPAssn	495	355	55	3,583	15,236
St. Ann's Maternity Hospital	Unit of St. Elizabeth Hospital						
St. Elizabeth Hospital♣○	Gen	Church	335	309	40	2,776	11,179
Stillwater Sanatorium♣	TB	Counties	104	101	..	...	121
Veterans Admin. Center♣	Gen	Vet	1,004	943	..	...	5,437
DeBance, 9,744—DeBance							
DeBance Hospital	Gen	NPAssn	34	28	11	662	1,841
Delaware, 8,944—Delaware							
Jane M. Case Hospital	Gen	NPAssn	55	35	10	427	1,734
Dennison, 4,413—Tuscarawas							
Twin City Hospital	Gen	NPAssn	36	32	14	648	1,632
Dover, 9,691—Tuscarawas							
Union Hospital	Gen	NPAssn	66	64	15	981	2,732
East Cleveland, 39,495—Cuyahoga							
Huron Road Hospital♣♣○	Gen	NPAssn	355	237	78	2,861	10,655
East Liverpool, 23,355—Columbiana							
East Liverpool City Hosp.♣○	Gen	City	125	97	24	1,357	4,117
Elyria, 25,130—Lorain							
Elyria Memorial Hospital and Gates Hospital for Crippled Children♣○	Gen	NPAssn	143	100	33	1,055	4,194
Findlay, 20,228—Hancock							
Findlay Hospital♣	Gen	NPAssn	76	50	12	1,133	3,734
Fremont, 14,710—Sandusky							
Community Hospital	Gen	NPAssn	17	13	4	80	460
Memorial Hospital♣	Gen	NPAssn	62	56	17	918	3,225
Galion, 8,685—Crawford							
Galion City Hospital	Gen	City	33	26	10	404	1,441
Gallipolis, 7,852—Gallia							
Gallipolis State Institute	Epil	State	1,932	1,903	..	...	277
Holzer Hospital♣○	Gen	Part	74	61	11	733	3,669
Green Springs, 930—Sandusky and Seneca							
Oak Ridge Sanatorium	TB	Indiv	127	65	..	...	101
Greenville, 7,745—Darke							
Wayne Hospital♣	Gen	NPAssn	55	32	18	764	2,196
Hamilton, 50,590—Butler							
Fort Hamilton Hospital♣♣	Gen	NPAssn	86	70	24	700	2,908
Mercy Hospital♣♣○	Gen	Church	280	226	45	1,777	8,234
Hillsboro, 4,713—Highland							
Hillsboro Hospital	Gen	NPAssn	26	16	6	242	720
Ironton, 15,851—Lawrence							
Charles S. Gray Deaconess Hospital	Gen	NPAssn	25	6	5	95	407
Lawrence County General Hospital	Gen	County	74	58	14	915	3,136
Kenton, 7,805—Hardin							
McKitrick Hospital	Gen	NPAssn	40	17	12	196	548
San Antonio Hospital	Gen	Church	66	44	16	438	1,581
Lakewood, 39,198—Cuyahoga							
Lakewood Hospital♣♣♣	Gen	City	129	117	28	1,181	5,411
Lancaster, 21,940—Fairfield							
Lancaster Municipal Hosp.♣○	Gen	City	74	57	22	1,118	4,187
Lima, 44,711—Allen							
District Tuberculosis Hosp...	TB	Counties	116	97	..	...	158
Lima Memorial Hosp.♣♣○	Gen	NPAssn	161	146	29	1,441	6,149
Lima State Hospital	Ment	State	1,300	1,146	..	...	442
St. Rita's Hospital♣○	Gen	Church	251	177	49	1,691	6,548
Lodi, 1,304—Medina							
Lodi Hospital	Gen	NPAssn	40	30	10	457	1,540
Logan, 6,177—Hocking							
Hocking Valley Hospital	Gen	NPAssn	37	21	10	459	1,354
Lorain, 44,125—Lorain							
St. Joseph's Hospital	Gen	Church	130	90	22	1,746	5,980
Macedonia, 734—Summit							
Hawthornden State Hospital	Ment	State	1,154	1,089	..	...	213
Mansfield, 37,154—Richland							
Mansfield General Hosp.♣○	Gen	NPAssn	173	167	37	1,778	7,032
Richland County Tuberculosis Sanatorium	TB	County	28	26	..	...	25
Marietta, 14,543—Washington							
Marietta Memorial Hospital	Gen	NPAssn	65	52	14	846	2,792
Marion, 30,817—Marion							
Marion City Hospital	Gen	City	105	91	21	1,471	5,980
Sawyer Sanatorium♣	Nerv	Indiv	50	29	..	...	156
Martins Ferry, 14,729—Belmont							
Martins Ferry Hospital♣○	Gen	NPAssn	120	100	30	1,140	5,697
Massillon, 26,644—Stark							
Massillon City Hospital♣○	Gen	NPAssn	174	152	34	1,307	6,373
Massillon State Hosp.♣♣	Ment	State	3,350	2,948	..	...	741
McConnelsville, 1,895—Morgan							
Rocky Glen Sanatorium	TB	Corp	135	114	..	...	178
Medina, 4,559—Medina							
Medina Community Hospital	Gen	NPAssn	35	24	12	267	1,281
Middletown, 31,720—Butler							
Middletown Hospital♣○	Gen	NPAssn	159	116	40	1,456	5,229
Millersburg, 2,930—Holmes							
Holmes County Joel E. Pomerene Memorial Hospital	Gen	County	30	13	8	285	1,077
Mount Vernon, 10,129—Knox							
Avalon Sanatorium	TB	NPAssn	70	46	..	...	82
Mercy Hospital	Gen	Church	66	63	12	667	4,900
Mount Vernon Hospital Sanitarium	Gen	NPAssn	54	37	9	224	1,564
Mount Vernon State Hosp.♣	TB	State	175	174	..	...	19
Munroe Falls, 511—Summit							
Summit County Home Hosp. Inst	Gen	County	150	122	..	...	122
Napoleon, 4,625—Henry							
S. M. Heller Memorial Hosp...	Gen	City	21	15	7	305	805

OHIO—Continued

Hospitals and Sanatoriums	Type of Service	Ownership or Control	Beds	Average Census †	Bassinets	Number of Births	Admissions †
Newark, 31,487—Licking							
Licking County Tuberculosis Sanatorium	TB	County	31	44	..	...	78
Newark Hospital♣	Gen	NPAssn	110	93	23	1,336	4,600
New London, 1,656—Huron							
New London Hospital	Gen	NPAssn	9	6	3	121	421
New Philadelphia, 12,229—Tuscarawas							
Tuscarawas Valley Sanatorium	TB	County	35	29	..	...	57
Norwalk, 8,211—Huron							
Norwalk Memorial Hospital	Gen	NPAssn	30	31	15	427	1,290
Oberlin, 4,305—Lorain							
Allen Hospital, Oberlin College♣	Gen	NPAssn	45	28	11	337	1,608
Oxford, 1,756—Butler							
Miami University Student Hospital	Inst	State	30	4	..	...	1,408
Painesville, 12,235—Lake							
Lake County Memorial Hosp.	Gen	County	123	97	3	1,187	5,617
Perrysburg, 3,457—Wood							
Rheinfrank Hospital	Gotter	Indiv	11	3	..	...	161
Piqua, 16,049—Miami							
Memorial Hospital♣	Gen	NPAssn	77	68	14	982	3,651
Port Clinton, 4,365—Ottawa							
H. B. Magruder Memorial Hospital	Gen	NPAssn	43	37	17	409	1,553
Portsmouth, 40,499—Scioto							
Mercy Hospital○	Gen	Church	87	71	16	989	4,679
Portsmouth General Hosp.♣○	Gen	City	93	88	13	747	4,354
Ravenna, 8,538—Portage							
Robinson Memorial Portage County Hospital	Gen	County	110	76	30	942	3,715
St. Clairsville, 2,797—Belmont							
Belmont Sanatorium	TB	County	56	45	..	. .	50
Salem, 12,303—Columbiana							
Central Clinic and Hospital	Gen	NPAssn	32	31	8	419	1,680
Salem City Hospital♣○	Gen	NPAssn	56	66	14	675	2,502
Sandusky, 24,874—Erie							
Good Samaritan Hospital♣	Gen	NPAssn	53	46	12	451	2,075
Providence Hospital♣○	Gen	Church	113	86	25	581	2,830
Shelby, 6,643—Richland							
Shelby Hospital	Gen	NPAssn	54	31	16	422	1,868
Sidney, 9,758—Shelby							
Wilson Memorial Hospital	Gen	NPAssn	58	47	12	577	2,569
South Euclid, 6,146—Cuyahoga							
Rainbow Hospital for Crippled and Convalescent Children♣	Unit of University Hospitals, Cleveland						
Springfield, 70,662—Clark							
Clark County Tuberculosis Sanatorium	TB	County	120	78	..	...	130
Springfield City Hospital♣○	Gen	City	273	219	56	2,786	7,103
Steubenville, 37,651—Jefferson							
Gill Memorial Hospital	Gen	Church	65	62	24	951	3,205
Ohio Valley Hospital♣○	Gen	NPAssn	200	186	40	1,808	7,973
Tiffin, 16,108—Seneca							
Mercy Hospital	Gen	Church	52	55	19	956	2,072
Tiffin State Hospital	Ment	State	559	461	..	...	161
Toledo, 282,349—Lucas							
East Side Hospital	Gen	NPAssn	35	16	5	91	610
Flower Hospital♣♣○	Gen	Church	135	134	37	1,853	5,141
Maumee Valley Hospital♣♣○	Gen	County	292	158	33	384	3,728
Mercy Hospital♣♣○	Gen	Church	275	284	65	2,853	11,051
Riverside Hospital♣○	Gen	NPAssn	154	147	44	1,450	6,956
Robinwood Hospital○	Gen	Church	90	77	16	498	2,836
St. Vincent's Hospital♣♣○	Gen	Church	310	292	50	1,883	10,530
Toledo Hospital♣♣○	Gen	NPAssn	270	237	50	2,507	9,432
Toledo State Hospital○	Ment	State	2,830	2,729	..	...	1,164
William W. Rorbe Memorial Hospital	TB	County	165	122	..	...	249
Troy, 9,697—Miami							
Stouder Memorial Hospital♣	Gen	NPAssn	50	51	14	808	2,654
Urbana, 8,335—Champaign							
Champaign County Hospital	Gen	County	42	15	12	360	1,232
Van Wert, 9,227—Van Wert							
Van Wert County Hospital	Gen	NPAssn	57	43	12	520	2,195
Wadsworth, 6,466—Medina							
Wadsworth Municipal Hosp.	Gen	City	37	37	16	631	1,366
Warren, 42,837—Trumbull							
St. Joseph's Riverside Hosp.♣	Gen	Church	113	92	27	928	4,737
Trumbull County Tuberculosis Hospital	TB	County	48	42	..	...	84
Trumbull Memorial Hosp.♣○	Gen	NPAssn	188	152	40	1,843	6,855
Warrensville (Cleveland P.O.), 1,175—Cuyahoga							
Sunny Acres, Cuyahoga County Tuberculosis Hospital♣♣	TB	County	350	322	..	...	361
Wauseon, 3,016—Fulton							
Dr. Ette Harrison Detwiler Memorial Hospital♣	Gen	NPAssn	51	35	11	622	2,011
Willard, 4,861—Huron							
Willard Municipal Hospital	Gen	City	36	31	10	284	1,183
Wilmington, 5,971—Clinton							
Dr. Kelly Hale Surgical Hosp.	Gen	Indiv	16	9	7	173	498
Wooster, 11,543—Wayne							
Beeson Hospital	Gen	NPAssn	30	31	5	381	1,777
Community Hospital	Gen	NPAssn	36	18	7	353	1,859
Worthington, 1,526—Franklin							
Harding Sanitarium♣♣	N&M	Corp	76	70	..	...	458
Xenia, 10,625—Greene							
McClellan Hospital	Gen	Corp	29	14	4	128	541
Youngstown, 167,720—Mahoning							
Mahoning Tuberculosis Sanatorium♣	TB	County	170	163	..	...	188
St. Elizabeth's Hospital♣♣○	Gen	Church	300	250	50	2,320	14,745

Key to symbols and abbreviations is on page 1356

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OHIO—Continued

Hospitals and Sanatoriums	Type of Service	Ownership or Control	Beds	Average Census †	Bassinets	Number of Births	Admissions †
Youngstown Hospital◆▲●	Gen	NPAssn	536	518	96	4,173	18,908
Youngstown Receiving Hosp.®	Ment	State	81	75	..	...	671
Zanesville, 37,860—Muskingum							
Bethesda Hospital▲●	Gen	NPAssn	135	94	25	1,074	3,841
Good Samaritan Hospital▲●	Gen	Church	145	124	27	1,384	4,819
Related Institutions							
Akron, 244,791—Summit							
Goodyear Hospital	Indus	NPAssn	18	8	..	...	248
Apple Creek, 519—Wayne							
Apple Creek State School	MeDe	State	794	761	..	...	63
Bluffton, 2,077—Allen							
Bluffton Community Hosp.	Gen	NPAssn	24	24	10	326	1,045
Cincinnati, 455,610—Hamilton							
Catherine Booth Home and Hospital	Mat	Church	12	13	13	357	500
Children's Convalescent Home of the Cincinnati Orphan Asylum▲	Conv	NPAssn	100	64	..	...	171
Children's Home (Hanna Hospital)	Inst	NPAssn	24	4	..	...	1,475
Home for Incurables	Incur	NPAssn	66	66	..	...	6
Madeline Marie Nursing Home	Conv	Indiv	77	68	..	...	55
St. Francis Hospital	ChrCancer	Church	300	264	..	...	2,581
St. George Convalescent Hosp.	Conv	Church	40	28	..	...	455
St. Joseph Maternity Hospital and Infant Home	Mat	Church	10	5	10	242	242
Cleveland, 878,336—Cuyahoga							
Children's Fresh Air Camp and Hospital	Conv	NPAssn	60	58	..	...	130
Ingleside Home	N&M	NPAssn	130	110	..	...	622
Columbus, 306,087—Franklin							
Columbus State School	MeDe	State	2,180	2,109	..	...	261
Florence Crittenton Home	Mat	NPAssn	42	16	24	170	185
Franklin County Home Hosp.	Inst	NPAssn	125	125	..	...	187
Ohio Penitentiary Hospital	Inst	State	160	127	..	...	3,138
Resthaven	Conv	Indiv	32	30	..	...	135
Dayton, 210,718—Montgomery							
Barney Convalescent Home for Crippled Children▲	Orth	NPAssn	30	26	..	...	144
Delaware, 8,944—Delaware							
Girls' Industrial School Hosp.	Inst	State	32	12	..	...	...
Euclid, 17,860—Cuyahoga							
Sue Mary, The Johanna Grasselli Home for Crippled Children	Orth	Church	24	24	..	...	30
Glendale, 2,339—Hamilton							
Maple Knoll Hospital and Home for the Friendless	Mat	NPAssn	36	30	18	566	645
Granville, 1,562—Licking							
Whisler Hall Memorial Hosp.	Inst	NPAssn	40	3	..	...	465
Greenfield, 4,228—Highland							
Greenfield Municipal Hospital	Gen	City	22	14	9	243	844
Hamilton, 39,599—Butler							
Butler County Tuberculosis Sanatorium	TB	Church	21	20	..	...	38
Lancaster, 31,540—Fairfield							
Boys' Industrial School Hosp.	Inst	State	100	11	..	...	465
Orient, 175—Pickaway							
Orient State School	MeDe	State	2,927	2,780	..	...	409
Reynoldsburg, 652—Franklin							
Nightingale Cottage Convalescent Hospital	Conv	NPAssn	30	25	..	...	43
State Soldiers Home, 900—Erie							
Ohio Soldiers' and Sailors' Home Hospital	Inst	State	200	90	..	...	200
Toledo, 290,349—Lucas							
Lucas County Hosp. Annex	Chr	County	90	90	..	...	53
Toledo Society for Crippled Children Convalescent Home▲	Orth	NPAssn	60	36	..	...	126
Warren, 27,067—Trumbull							
Elm Manor	Alcoh	Indiv	8	1	..	...	39
Warrensville (Cleveland P.O.), 1,175—Cuyahoga							
Cleveland Municipal Chronic Hospital	Chr	City	160	160	..	...	210
Wickliffe, 3,132—Lake							
Ridgecliff Sanitarium	N&M	Corp	50	47	..	...	123
Wickhaven Sanitarium	N&M	NPAssn	15	10	..	...	52
Wooster, 11,540—Wayne							
Hygeia Hall	Inst	NPAssn	25	2	..	...	361
Xenia, 10,652—Greene							
Ohio Soldiers' and Sailors' Orphans' Home Hospital	Inst	State	60	8	..	...	226

OKLAHOMA

Hospitals and Sanatoriums	Type of Service	Ownership or Control	Beds	Average Census †	Bassinets	Number of Births	Admissions †
Ada, 15,143—Pontotoc							
Valley View Hospital▲	Gen	NPAssn	80	62	18	747	4,386
Altus, 6,395—Jackson							
Altus Hospital	Gen	Indiv	21	12	6	150	921
Alva, 5,865—Woods							
Alva General Hospital	Gen	City	30	26	10	328	1,643
Anadarko, 5,579—Caddo							
Anadarko Hospital	Gen	Part	26	17	6	256	1,089
Ardmore, 18,858—Carter							
Ardmore Sanit. and Hospital	Gen	NPAssn	64	11	10	91	691
Hardy Sanitarium▲	Gen	Indiv	64	38	18	819	1,371
Atoka, 2,542—Atoka							
Cotton Clinic Hospital	Gen	Corp	15	10	6	147	934
Bartlesville, 16,367—Washington							
Washington County Memorial Hospital	Gen	County	72	53	19	805	1,575
Beaver, 1,106—Beaver							
Beaver Hospital	Gen	Part	20	18	5	176	909
Blackwell, 8,537—Kay							
Blackwell General Hospital	Gen	Church	35	29	10	335	1,272
Carnegie, 1,740—Caddo							
Carnegie Hospital	Gen	Corp	14	8	5	168	697
Cherokee, 2,553—Alfalfa							
Masonic Hospital	Gen	NPAssn	48	25	8	162	1,280
Chickasha, 14,111—Grady							
Chickasha Hosp. and Clinic	Gen	Part	54	29	10	198	1,284
Cottage Hospital	Gen	Indiv	10	10	3	66	367
General Hospital	Gen	Indiv	20	12	12	489	1,188
Claremore, 4,154—Rogers							
Claremore General Hospital	Gen	Indiv	15	7	7	284	783
Claremore Indian Hospital▲	Gen	IA	50	34	18	232	1,002
Clinton, 6,776—Custer							
Clinton Indian Hospital	Gen	IA	32	7	5	39	439
Western Oklahoma State Hospital◆	Gen	State	125	68	16	412	2,280
Western Oklahoma Tuberculosis Sanatorium▲	TB	State	200	170	..	...	784
Concho, 290—Canadian							
Cheyenne and Arapaho Hospitals	Gen	IA	34	15	8	97	515
Cordell, 2,776—Washita							
Florence Hospital	Gen	Indiv	23	6	6	143	485
Cushing, 7,765—Payne							
Masonic Hospital▲	Gen	NPAssn	30	27	6	310	1,411
Duncan, 9,207—Stephens							
Lindley Hospital	Gen	Indiv	25	5	4	272	1,360
Patterson Hospital	Gen	Part	30	25	9	288	1,515
Weedn Hospital	Gen	Indiv	60	13	12	122	1,946
Durant, 10,027—Bryan							
Durant Hospital	Gen	Part	27	19	11	339	1,690
Evergreen Sanitarium	Gen	Indiv	21	7	6	90	414
Haynie Hospital and Clinic	Gen	Indiv	11	5	4	77	2,051
Elk City, 5,021—Beckham							
Community Hospital	Gen	NPAssn	100	27	9	253	2,011
Tisdal Hospital	Gen	Indiv	24	16	8	191	1,112
El Reno, 10,078—Canadian							
Catto Hospital	Gen	Indiv	12	5	2	25	196
El Reno Sanitarium	Gen	Part	32	20	8	425	1,158
Federal Reformatory Hosp.▲	Inst	USPHS	44	15	..	...	709
Enid, 28,081—Garfield							
Enid General Hospital▲●	Gen	NPAssn	90	84	12	340	2,700
St. Mary's Hospital and Annex▲●	Gen	Church	150	115	25	1,167	6,244
Fort Sill, —Comanche							
Station Hospital▲	Gen	Army	238	90	16	373	4,507
Fort Supply, 414—Woodward							
Western Oklahoma Hospital	Ment	State	1,000	1,197	..	...	238
Frederick, 5,109—Tillman							
Frederick Clinic Hospital	Gen	Part	18	8	5	103	529
Spurgeon and Arington Hosp.	Gen	Indiv	15	8	9	227	716
Grandfield, 1,116—Tillman							
Grandfield Hospital	Gen	Indiv	12	4	3	46	264
Granite, 1,456—Greer							
Lewis Hospital	Gen	Indiv	17	5	5	74	363
Guthrie, 10,018—Logan							
Benedictine Heights Hospital	Gen	Church	35	25	12	338	1,095
Henryetta, 6,905—Okmulgee							
Henryetta Hospital	Gen	Indiv	25	14	6	119	724
John Taylor Hospital	Gen	Indiv	15	10	3	130	850
Hobart, 5,117—Kiowa							
General Hospital	Gen	Part	41	16	10	371	1,572
Hobbenville, 6,622—Hughes							
St. Francis Hospital	Gen	Church	27	17	12	290	1,365
Hollis, 2,732—Harmon							
Husband Memorial Hospital	Gen	Part	16	...	7	Estab. 1947	
Hominy, 3,367—Osage							
Hominy City Hospital	Gen	City	14	9	7	165	504
Hugo, 5,366—Choctaw							
Johnson Hospital	Gen	Indiv	9	3	7	143	335
Lawton, 18,055—Comanche							
Angus Hospital	Gen	Part	19	10	12	378	616
Kiowa Indian Hospital▲	Gen	IA	150	87	18	298	2,267
Southwestern Clinic Hospital	Gen	Part	41	33	18	489	2,135
McAlester, 12,401—Pittsburg							
Albert Pike Hospital	Gen	NPAssn	47	38	10	283	2,230
St. Mary's Hospital▲	Gen	Church	60	38	15	546	2,305
U. S. Naval Dispensary	Gen	Navy	19	3	..	...	250
Miami, 5,345—Ottawa							
Miami Baptist Hospital	Gen	Church	75	28	16	671	2,015
Muskogee, 32,332—Muskogee							
Muskogee General Hospital●	Gen	City	198	73	26	700	3,594
Oklahoma Baptist Hosp.▲●	Gen	Church	100	60	16	471	2,910
Veterans Admin. Hospital▲	Gen	Vet	286	250	..	...	3,212
Norman, 11,429—Cleveland							
Central Oklahoma State Hospital◆●	Ment	State	2,250	3,151	..	...	1,371
Ellison Infirmary▲	Inst	State	50	13	..	...	1,951
Norman Municipal Hospital	Gen	City	50	37	18	605	2,200
Okeene, 1,079—Blaine							
Okeene Municipal Hospital	Gen	City	10	6	5	80	335
Okemah, 3,511—Okfuskee							
Clinic Hospital	Gen	Indiv	10	6	5	185	500
Oklahoma City, 204,424—Oklahoma							
Bone and Joint Hospital—McBride Clinic◆▲	Orth	Corp	54	46	..	...	1,425
Capital Hill General Hospital	Gen	Corp	50	35	18	747	2,296
Coyne Campbell Sanitarium	N&M	Corp	70	49	..	...	1,341
Mercy Hospital▲●	Gen	Church	150	127	25	976	6,343

Key to symbols and abbreviations is on page 1556

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OKLAHOMA—Continued

Hospitals and Sanatoriums	Type of Service	Ownership or Control	Beds	Average Census †	Bassinets	Number of Births	Admissions †
Oklahoma Medical Center	Gen	State	160	111	12	15	4,657
Polyclinic Hospital	Gen	Indiv	95	59	16	653	2,651
St. Anthony Hospital	Gen	Church	375	327	75	3,142	12,801
Station Hospital	Gen	Army	25	11	..	...	771
University Hospitals	GenOr	State	506	316	30	960	5,914
Veterans Admin. Hospital	Gen	Vet	220	180	..	...	2,812
Wesley Hospital	Gen	Part	200	132	33	1,426	6,721
Okmulgee, 16,651—Okmulgee							
Mine Vernon Hospital	Gen	Part	13	10	..	...	605
Okmulgee City Hospital	Gen	City	50	27	13	339	1,369
Pauls Valley, 5,304—Garvin							
Lindsey-Johnson Hospital	Gen	Part	18	11	6	171	491
Pauls Valley State Hospital	Ep	State	321	315	..	...	78
Pawhuska, 5,445—Osage							
Osage County Hospital	Gen	County	48	18	4	55	364
Pawhuska Municipal Hospital	Gen	City	32	15	8	194	1,380
Pawnee, 2,742—Pawnee							
Pawnee-Ponca Indian Hosp.	Gen	IA	42	16	8	96	540
Picher, 5,848—Ottawa							
Picher Hospital	Gen	Part	17	9	2	2	410
Ponca City, 16,794—Kay							
Ponca City Hospital	Gen	Church	75	59	17	792	3,134
Prague, 1,422—Lincoln							
Rollins Hospital	Gen	Indiv	10	5	5	146	402
Pryor, 2,501—Mayes							
Whitaker Hospital	Gen	Part	18	12	5	199	1,469
Sapulpa, 12,249—Creek							
Sapulpa City Hospital	Gen	City	21	9	6	280	1,032
Sayre, 5,937—Beckham							
Sayre Hospital	Gen	Indiv	14	14	6	256	1,170
Seminole, 11,547—Seminole							
Harber Hospital	Gen	Corp	27	30	7	249	1,359
Sentinel, 1,088—Washita							
McMurry and Stowers Hosp.	Gen	Part	25	12	6	92	666
Shattuck, 1,275—Ellis							
Shattuck Hospital	Gen	Part	42	23	8	260	1,160
Shawnee, 22,053—Pottawatomie							
A. U. H. Hospital	Gen	Part	25	28	6	353	1,300
Shawnee Indian Sanatorium	TB	IA	90	76	..	...	122
Shawnee Municipal Hospital	Gen	City	75	41	30	469	2,469
Stillwater, 10,407—Payne							
Agricultural and Mechanical College Infirmary	Inst	State	110	16	14	...	1,777
Stillwater Municipal Hosp.	Gen	City	40	44	20	848	2,817
Sulphur, 7,976—Murray							
Oklahoma State Veterans Hospital	GenTb	State	136	108	..	...	741
Taft, 772—Muskogee							
Taft State Hospital	Ment	State	800	779	..	...	276
Tahlequah, 5,627—Cherokee							
Tahlequah City Hospital	Gen	City	33	10	9	266	1,061
Wm. W. Hastings Hospital	Gen	IA	72	34	13	610	1,325
Talihina, 1,057—Le Flore							
Eastern Oklahoma State Tuberculosis Sanatorium	TB	State	300	220	..	...	439
Talihina Indian Hospital	GenTb	IA	237	148	20	216	1,463
Tulsa, 142,157—Tulsa							
Hillcrest Memorial Hosp.	Gen	NPAssn	356	198	35	2,915	12,637
Morton Memorial Hospital	Gen	NPAssn	44	15	10	328	965
St. John's Hospital	Gen	Church	271	250	60	2,356	13,192
Vinita, 5,085—Craig							
Eastern Oklahoma Hospital	Ment	State	2,650	2,570	..	...	492
Vinita Hospital	Gen	Corp	18	12	7	331	942
Waurika, 2,458—Jefferson							
Waurika Hospital	Gen	Corp	24	11	4	102	612
Woodward, 5,406—Woodward							
Memorial Hospital	Gen	Corp	31	21	5	282	1,745
Related Institutions							
Enid, 28,681—Garfield							
Northern Oklahoma Hospital Me	State	State	1,272	1,200	..	...	56
Oklahoma, 204,424—Oklahoma							
Campbell Tuberculosis Sanat.	TB	Indiv	30	18	..	...	138
Deaconess Hospital	Mat	Church	22	9	25	263	407
Tahlequah, 3,627—Cherokee							
Sequoyah Vocational School Hospital	Inst	IA	19	4	..	...	329
Tulsa, 142,157—Tulsa							
Salvation Army Home and Hospital	Mat	Church	25	2	15	41	55
Tulsa Home for Convalescent Children	Orth	NPAssn	30	25	..	...	36
Watonga, 2,828—Blaine							
Watonga Hospital	Gen	Indiv	16	13	4	180	902
Wynnewood, 2,315—Garvin							
Wynnewood Hospital Clinic	Gen	Part	10	7	6	215	654

OREGON

Hospitals and Sanatoriums	Type of Service	Ownership or Control	Beds	Average Census †	Bassinets	Number of Births	Admissions †
Hospitals and Sanatoriums							
Bend, 10,021—Deschutes							
St. Charles Hospital	Gen	Church	60	32	10	476	2,711
Burns, 2,595—Harney							
Valley View Hospital	Gen	Part	18	13	6	129	554
Chemawa, 709—Marion							
Chemawa Indian Hospital	Gen	IA	40	7	3	...	471
Coos Bay, 5,259—Coos							
McAuley Hospital	Gen	Church	50	34	10	386	1,997
Corvallis, 8,392—Benton							
Corvallis General Hospital	Gen	NPAssn	60	42	28	745	2,282
Oregon State College Student Health Service	Inst	State	30	8	..	...	647
Dallas, 3,579—Polk							
Dallas Hospital	Gen	Corp	30	20	10	218	947
Eugene, 20,823—Lane							
Eugene Hospital and Clinics	Gen	Part	47	37	..	...	1,995
Sacred Heart General Hosp.	Gen	Church	180	108	58	2,621	8,779
Grants Pass, 6,028—Josephine							
Josephine General Hospital	Gen	County	75	70	15	543	2,636
Hillsboro, 3,747—Washington							
Jones Hospital	Gen	Indiv	60	56	18	358	2,897
Hood River, 3,280—Hood River							
Hood River Hospital	Gen	NPAssn	40	24	9	308	1,766
Klamath Falls, 16,497—Klamath							
Hillside Hospital	Gen	Corp	57	41	..	...	2,649
Klamath Valley Hospital	Gen	Corp	85	59	38	1,088	2,480
La Grande, 7,747—Union							
St. Joseph Hospital	Gen	Church	60	43	13	330	1,886
Lakeview, 2,466—Lake							
Lakeview Hospital	Gen	Corp	18	8	6	142	688
Lebanon, 2,779—Linn							
Lebanon General Hospital	Gen	Part	30	15	7	362	1,373
McMinnville, 3,706—Yamhill							
General Hospital	Gen	Corp	50	22	20	275	1,127
McMinnville Hospital	Gen	Corp	46	43	13	325	2,818
Medford, 11,281—Jackson							
Community Hospital	Gen	NPAssn	48	34	12	455	1,936
Sacred Heart Hospital	Gen	Church	75	60	10	484	2,719
Milwaukie, 1,871—Clackamas							
Matson Memorial Hospital for Diseases of the Chest	TB	NPAssn	45	35	..	...	102
Myrtle Point, 1,296—Coos							
Mast Hospital	Gen	Indiv	40	13	8	169	1,183
Newberg, 2,960—Yamhill							
Willamette Hospital	Gen	NPAssn	22	12	8	183	675
North Bend, 4,262—Coos							
Keizer Brothers Hospital	Gen	Corp	50	41	10	413	1,987
Ontario, 3,551—Malheur							
Holy Rosary Hospital	Gen	Church	50	46	12	401	2,035
Oregon City, 6,124—Clackamas							
Hutchinson General Hospital	Gen	Part	38	22	8	287	980
Oregon City Hospital	Gen	Corp	64	50	16	604	2,044
Pendleton, 8,847—Umatilla							
Eastern Oregon State Hosp.	Ment	State	1,410	1,354	..	...	413
St. Anthony's Hospital	Gen	Church	115	88	29	460	3,004
Portland, 305,394—Multnomah							
Doernbecher Memorial Hospital for Children	Unit of University of Oregon Medical School Hospitals and Clinics						
Emanuel Hospital	Gen	Church	330	220	95	4,445	13,910
Good Samaritan Hosp.	Gen	Church	430	300	75	2,167	12,414
Holladay Park Hospital	Gen	NPAssn	75	56	13	280	2,044
Juvenile Hospital Clinic	Ven	NPAssn	48	47	2	1	106
Morningside Hospital	Ment	Fed	420	346	..	...	43
Multnomah Hospital	Unit of University of Oregon Medical School Hospitals and Clinics						
Permanente Hospital	Unit of Northern Permanente Hospital, Vancouver, Wash.						
Physicians and Surgeons Hospital	Gen	NPAssn	125	108	..	...	5,116
Portland Sanitarium and Hospital	Gen	Church	148	146	42	2,037	8,072
Providence Hospital	Gen	Church	227	180	..	...	7,310
St. Vincent's Hospital	Gen	Church	356	315	68	2,823	8,000
Salvation Army White Shield Home	Mat	Church	7	6	9	139	143
Shriners Hospital for Crippled Children	Orth	NPAssn	60	58	..	...	322
Theo. B. Wilcox Memorial Hospital	Unit of Good Samaritan Hospital						
University of Oregon Medical School Hospitals and Clinics	GenTb	CoState	418	376	30	591	6,637
University State Tuberculosis Hospital	Unit of University of Oregon Medical School Hospitals and Clinics						
Veterans Admin. Hospital	Gen	Vet	515	461	..	...	7,283
Prairie City, 647—Grant							
Blue Mountain General Hosp.	Gen	City	28	14	6	154	745
Prineville, 2,358—Crook							
Prineville General Hospital	Gen	Indiv	25	13	6	180	1,093
Roseburg, 4,924—Douglas							
Mercy Hospital	Gen	Church	50	23	12	652	2,720
Veterans Admin. Hospital	Ment	Vet	670	560	..	...	577
St. Helens, 4,364—Columbia							
St. Helens Hospital	Gen	Part	10	4	8	199	250
Salem, 30,908—Marion							
Oregon State Hospital	Ment	State	2,700	2,684	..	...	1,536
Oregon State Tuberculosis Hospital	TB	State	280	172	..	...	191
Salem Deaconess Hospital	Gen	Church	104	90	24	1,019	3,85[illegible]
Salem General Hospital	Gen	NPAssn	80	79	18	1,130	5,85[illegible]

Key to symbols and abbreviations is on page 1386

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OREGON—Continued

Hospitals and Sanatoriums	Type of Service	Ownership or Control	Beds	Average Census †	Bassinets	Number of Births	Admissions †
Seaside, 2,502—Clatsop							
Seaside Hospital	Gen	City	32	22	9	144	1,120
Silverton, 2,925—Marion							
Silverton General Hospital	Gen	NPAssn	20	21	9	328	1,215
Sweet Home, 1,698—Linn							
Langmack Hospital	Gen	Corp	34	25	13	277	1,275
The Dalles, 6,256—Wasco							
Eastern Oregon State Tuberculosis Hospital	TB	State	135	132	..	...	121
Mid-Columbia Hospital	Gen	Indiv	22	15	6	85	733
The Dalles General Hosp.◇	Gen	NPAssn	75	53	20	450	2,410
Tillamook, 2,751—Tillamook							
Tillamook General Hospital	Gen	County	50	20	10	340	2,210
Toledo, 2,208—Lincoln							
Lincoln Hospital	Gen	Corp	25	18	5	199	906
Troutdale, 211—Multnomah							
Multnomah County Tuberculosis Pavilion	TB	County	36	21	..	...	80
Warm Springs, 135—Jefferson							
Warm Springs Hospital	Gen	IA	21	10	6	34	358
Related Institutions							
Enterprise, 1,782—Wallowa							
Wallowa County Hospital	Gen	County	21	...	5	Estab. 1947	
Portland, 305,394—Multnomah							
City Isolation Hospital	Iso	City	115	17	..	5	1,604
Raleigh Hills Sanitarium	Alcoh	Corp	18	14	..	...	1,191
Salem, 30,998—Marion							
Oregon Fairview Home	MeDe	State	1,150	1,098	..	...	145
Oregon State Penitentiary Hospital	Inst	State	42	15	..	...	500
Oregon State School for the Deaf	Inst	State	20	1	..	...	537

PENNSYLVANIA

Hospitals and Sanatoriums	Type of Service	Ownership or Control	Beds	Average Census †	Bassinets	Number of Births	Admissions †
Abington, 3,309—Montgomery							
Abington Memorial Hosp.◇△◇	Gen	NPAssn	303	219	87	1,786	7,907
Allentown, 86,904—Lehigh							
Allentown Hospital◇△◇	Gen	NPAssn	364	353	35	2,332	11,355
Allentown State Hospital◇△◇	Ment	State	1,900	1,956	..	...	407
Sacred Heart Hospital◇△◇	Gen'To	Church	291	272	64	1,629	7,340
Allenwood, 409—Union							
Devitt's Camp	TB	NPAssn	104	100	..	...	280
Altoona, 80,214—Blair							
Altoona Hospital◇△◇	Gen	NPAssn	184	170	40	1,726	6,125
Mercy Hospital◇△◇	Gen	NPAssn	165	122	54	1,316	5,555
Ambler, 3,952—Montgomery							
Dufur Hospital	N&M	NPAssn	106	84	..	...	424
Ashland, 7,045—Schuylkill							
Ashland State Hospital◇△◇	Gen	State	173	139	20	780	3,502
Aspinwall, 4,716—Allegheny							
Veterans Admin. Hospital◇△	Gen	Vet	941	869	..	...	6,405
Beaver Falls, 17,606—Beaver							
Providence Hospital◇△◇	Gen	NPAssn	96	91	36	980	3,315
Bedford, 3,208—Bedford							
Timmins' Hospital	Gen	Indiv	17	12	4	161	657
Bellefonte, 5,304—Centre							
Centre County Hospital	Gen	NPAssn	67	65	22	903	2,122
Bellevue (Pittsburgh P. O.), 10,459—Allegheny							
Suburban General Hospital◇△	Gen	NPAssn	121	93	25	703	3,507
Berwick, 13,181—Columbia							
Berwick Hospital	Gen	NPAssn	63	35	12	516	1,811
Bethlehem, 52,536—Northampton							
Doctors Hospital	Gen	Part	20	...	10	Estab. 1947	
St. Luke's Hospital◇△◇	Gen	NPAssn	334	225	46	2,604	8,564
Bloomsburg, 9,756—Columbia							
Bloomsburg Hospital	Gen	NPAssn	121	70	25	664	2,472
Blossburg, 1,655—Tioga							
Blossburg State Hospital◇△	Gen	State	90	80	9	224	1,502
Braddock, 18,536—Allegheny							
Braddock General Hosp.◇△◇	Gen	NPAssn	153	156	42	1,657	4,683
Bradford, 17,651—McKean							
Bradford Hospital◇△◇	Gen	NPAssn	121	111	30	883	4,502
Brookville, 4,207—Jefferson							
Brookville Hospital△	Gen	NPAssn	39	36	10	467	2,079
Brownsville, 8,015—Fayette							
Brownsville General Hosp.◇△◇	Gen	NPAssn	89	74	10	824	3,740
Bryn Mawr, 10,936—Montgomery							
Bryn Mawr Hospital◇△◇	Gen	NPAssn	285	221	48	1,778	7,007
Butler, 24,477—Butler							
Butler County Memorial Hospital◇	Gen	NPAssn	166	150	36	1,482	5,510
Veterans Admin. Hospital	Gen	Vet	1,000	580	..	...	4,804
Canonsburg, 12,598—Washington							
Canonsburg General Hosp.◇	Gen	NPAssn	84	76	22	902	2,791
Carbondale, 19,371—Lackawanna							
Carbondale General Hospital◇△	Gen	NPAssn	69	50	18	392	1,934
St. Joseph's Hospital◇	Gen	Church	86	72	30	441	2,429
Carlisle, 13,394—Cumberland							
Carlisle Hospital	Gen	NPAssn	97	97	27	920	4,463
Station Hospital	Gen	Army	140	48	10	79	1,735
Chambersburg, 14,652—Franklin							
Chambersburg Hospital	Gen	NPAssn	94	88	12	815	3,298
Charleroi, 10,754—Washington							
Charleroi-Monessen Hospital△	Gen	NPAssn	128	127	32	1,485	6,983
Chester, 59,295—Delaware							
Chester Hospital◇△◇	Gen	NPAssn	265	224	45	1,778	7,321
J. Lewis Crozer Homeopathic Hospital	Gen'neur	NPAssn	96	77	31	884	3,587

PENNSYLVANIA—Continued

Hospitals and Sanatoriums	Type of Service	Ownership or Control	Beds	Average Census †	Bassinets	Number of Births	Admissions †
Clarks Summit, 2,691—Lackawanna							
Clarks Summit State Hosp.	Ment	State	1,334	1,139	..	...	611
Clearfield, 9,372—Clearfield							
Clearfield Hospital◇	Gen	NPAssn	107	80	18	679	3,320
Coaldale, 6,165—Schuylkill							
Coaldale State Hospital△	Gen	State	120	111	18	693	4,021
Coatesville, 14,006—Chester							
Clement Atkinson Memorial Hospital	Gen	NPAssn	17	8	3	73	242
Coatesville Hospital◇△	Gen	NPAssn	120	70	25	800	3,156
Veterans Admin. Hospital◇△	Ment	Vet	2,119	2,048	..	...	677
Columbia, 11,547—Lancaster							
Columbia Hospital	Gen	NPAssn	48	28	14	519	1,357
Confluence, 1,025—Somerset							
Price Hospital	Gen	Indiv	14	6	8	119	208
Connellsville, 13,608—Fayette							
Connellsville State Hospital△	Gen	State	109	74	33	964	3,280
Corry, 6,982—Erie							
Corry Hospital	Gen	NPAssn	40	36	8	387	1,857
Coudersport, 2,197—Potter							
Potter County Memorial Hospital	Gen	NPAssn	43	34	8	174	1,634
Cresson, 2,500—Cambria							
Pennsylvania State Tuberculosis Sanatorium No. 2	TB	State	840	573	..	...	379
Danville, 7,122—Montour							
Danville State Hospital◇△	Ment	State	2,206	2,007	..	...	405
George F. Geisinger Memorial Hospital◇△◇	Gen	NPAssn	194	162	36	1,086	7,386
Darby, 10,334—Delaware							
Fitzgerald-Mercy Hosp.◇△◇	Gen	Church	200	166	64	2,200	6,650
Dixmont, 198—Allegheny							
Dixmont State Hospital	Ment	State	1,631	980	..	...	37
Drexel Hill,—Delaware							
Delaware County Hospital△	Gen	NPAssn	80	71	16	539	2,735
Dubois, 12,080—Clearfield							
Dubois Hospital	Gen	Church	61	48	14	497	2,402
Maple Avenue Hospital	Gen	NPAssn	94	73	15	446	3,447
Eagleville, 500- Montgomery							
Eagleville Sanatorium for Consumptives◇△	TB	NPAssn	188	182	..	...	180
Easton, 33,586—Northampton							
Betts Hospital	Gen	NPAssn	54	45	24	634	1,962
Easton Hospital◇△◇	Gen	NPAssn	186	142	34	1,205	5,819
East Stroudsburg, 6,404—Monroe							
General Hospital of Monroe County△	Gen	NPAssn	61	51	18	565	2,628
Elizabethtown, 4,315—Lancaster							
Philadelphia Free Masons' Memorial Hosp. Masonic Homes	Inst	NPAssn	165	156	..	...	547
State Hospital for Crippled Children◇△	Orth	State	225	86	..	...	91
Elwood City, 12,825—Lawrence							
Elwood City Hospital△	Gen	NPAssn	60	54	31	753	2,351
Elwyn, 300—Delaware							
Elwyn Training School	MeDe	NPAssn	1,130	1,000	..	...	97
Erie, 116,955—Erie							
Erie County Tuberculosis Hospital	TB	County	65	62	..	...	101
Hamot Hospital◇△◇	Gen	NPAssn	280	262	42	1,837	9,316
St. Vincent's Hospital◇△◇	Gen	NPAssn	281	208	71	3,089	9,970
Zem Zem Hospital for Crippled Children	Orth	NPAssn	50	35	..	...	45
Everett, 24,425—Bedford							
Everett Hospital	Gen	County	36	17	8	148	712
Franklin, 9,948—Venango							
Franklin Hospital	Gen	NPAssn	74	54	18	589	2,668
Gettysburg, 5,910—Adams							
Annie M. Warner Hospital△	Gen	NPAssn	58	60	15	688	2,313
Gladwyne, 1,236—Montgomery							
Gladwyne Colony	N&M	Indiv	90	80	..	...	128
Greensburg, 16,745—Westmoreland							
Westmoreland Hospital◇△◇	Gen	NPAssn	190	168	40	2,912	7,167
Greenville, 5,149—Mercer							
Greenville Hospital	Gen	NPAssn	64	41	20	556	2,686
Grove City, 6,296—Mercer							
Grove City Hospital	Gen	NPAssn	31	20	10	313	831
Hamburg, 3,717—Berks							
Pennsylvania State Sanatorium for Tuberculosis	TB	State	776	588	..	...	448
Hanover, 13,676—York							
Hanover General Hospital△	Gen	NPAssn	80	71	18	1,216	3,122
Harrisburg, 85,968—Dauphin							
Harrisburg Hospital◇△◇	Gen	NPAssn	312	306	56	2,295	9,916
Harrisburg Polyclinic Hospital◇△◇	Gen	NPAssn	200	172	46	1,781	6,631
Harrisburg State Hospital◇△	Ment	State	2,010	2,444	..	...	684
Keystone Hospital	Gen	Indiv	30	No data supplied			
Hazleton, 38,009—Luzerne							
Hazleton State Hospital△	Gen	State	180	172	30	998	6,694
Hollidaysburg, 5,910—Blair							
Hollidaysburg State Hosp.	Ment	State	356	364	..	...	97
Homestead, 19,041—Allegheny							
Homestead Hospital◇	Gen	NPAssn	122	100	28	739	3,653
Honesdale, 5,067—Wayne							
Wayne County Memorial Hosp.	Gen	NPAssn	30	30	9	304	1,000
Huntingdon, 7,170—Huntingdon							
J. C. Blair Memorial Hosp.△	Gen	NPAssn	70	76	18	758	2,969
Indiana, 10,058—Indiana							
Indiana Hospital◇	Gen	NPAssn	100	108	34	1,180	6,442
Jersey Shore, 5,432—Lycoming							
Jersey Shore Hospital	Gen	NPAssn	32	23	10	235	1,141

Key to symbols and abbreviations is on page 1398

PENNSYLVANIA—Continued

Hospitals and Sanatoriums	Type of Service	Ownership or Control	Beds	Average Census	Daily Admissions	Number of Births	Admissions
Johnstown, 66,668—Cambria							
Conemaugh Valley Memorial Hospital	Gen	NPAssn	346	335	69	1,811	11,549
Lee Homeopathic Hospital	Gen	NPAssn	75	57	20	610	2,073
Mercy Hospital	Gen	Church	116	106	28	962	4,727
Kane, 6,135—McKean							
Community Hospital	Gen	NPAssn	39	41	12	244	1,481
Kane Summit Hospital	Gen	NPAssn	23	20	6	217	816
Kingston, 20,579—Luzerne							
Nesbitt Memorial Hosp.	Gen	NPAssn	200	150	40	1,479	6,280
Kittanning, 7,550—Armstrong							
Armstrong County Hospital	Gen	NPAssn	69	62	24	986	2,697
Lancaster, 61,345—Lancaster							
Lancaster General Hosp.	Gen	NPAssn	241	228	60	2,392	8,165
Rossmere Sanatorium	TB	CyCo	56	51	..	...	77
St. Joseph's Hospital	Gen	Church	232	180	40	1,159	6,793
Lansdale, 9,216—Montgomery							
Elm Terrace Hospital	Gen	NPAssn	39	25	14	327	2,131
Latrobe, 11,111—Westmoreland							
Latrobe Hospital	Gen	NPAssn	132	141	43	1,286	4,478
Laureldon, 327—Union							
Laurelton State Village	MeDe	State	91	59	..	...	86
Lebanon, 27,306—Lebanon							
Good Samaritan Hospital	Gen	NPAssn	124	84	30	1,227	3,900
Lebanon Sanatorium	Gen	NPAssn	40	33	16	584	1,230
Veterans Admin. Hospital	Gen	Vet	183	...	..	Estab. 1947	
Leetsdale, 2,232—Allegheny							
D. T. Watson Home for Crippled Children	Orth	NPAssn	100	91	..	...	231
Lewisburg, 3,571—Union							
Evangelical Hospital	Gen	Church	47	46	22	717	1,573
U. S. Penitentiary Hospital	Inst	USPHS	64	19	..	...	767
Lewistown, 13,017—Mifflin							
Lewistown Hospital	Gen	NPAssn	114	108	21	997	3,574
Limport, 250—Lehigh							
Sacred Heart Sanatorium	Unit of Sacred Heart Hospital, Allentown						
Lock Haven, 10,810—Clinton							
Lock Haven Hospital	Gen	NPAssn	83	67	24	718	2,929
Teah Private Hospital	Gen	Indiv	30	9	6	182	1,058
Mayview, 400—Allegheny							
Mayview State Hospital	Ment	State	3,079	3,004	..	...	727
Pittsburgh City Home and Hospitals	Unit of Allegheny County Institution District Hospital, Woodville						
McKeesport, 55,355—Allegheny							
McKeesport Hospital	Gen	NPAssn	275	238	50	3,109	8,457
McKees Rocks, 17,021—Allegheny							
Ohio Valley General Hosp.	Gen	NPAssn	59	46	24	584	2,256
Meadville, 18,919—Crawford							
Meadville City Hospital	Gen	NPAssn	122	101	28	819	4,974
Spencer Hospital	Gen	NPAssn	116	77	22	654	3,774
Mercer, 2,272—Mercer							
Mercer Cottage Hospital	Gen	Corp	60	27	5	143	1,413
Mercer Sanitarium	N&M	Part	42	37	..	...	121
Meyersdale, 3,250—Somerset							
Hazel McGilvery Hospital	Gen	NPAssn	15	10	8	233	791
Monaca, 7,061—Beaver							
Beaver County Sanatorium	TB	County	62	57	..	...	61
Monessen, 20,257—Westmoreland							
Gemmill Hospital	ENT	Part	17	8	..	...	760
Monongahela, 8,825—Washington							
Memorial Hospital	Gen	NPAssn	74	70	25	848	2,796
Mount Pleasant, 5,824—Westmoreland							
Henry Clay Frick Memorial Hospital	Gen	NPAssn	71	54	27	920	2,730
Muncy, 2,606—Lycoming							
Muncy Valley Hospital	Gen	NPAssn	20	18	12	184	501
Nanticoke, 24,387—Luzerne							
Nanticoke State Hospital	Gen	State	100	108	15	695	4,045
New Brighton, 9,630—Beaver							
Beaver Valley General Hospital	Gen	NPAssn	80	70	18	719	2,849
New Castle, 47,638—Lawrence							
Jameson Memorial Hosp.	Gen	NPAssn	154	149	36	1,468	6,006
New Castle Hospital	Gen	Church	113	100	22	702	4,256
New Cumberland, 4,525—Cumberland							
Station Hospital	Gen	Army	100	50	3	23	1,586
New Kensington, 24,055—Westmoreland							
Citizens General Hospital	Gen	NPAssn	147	133	38	1,715	5,555
New Wilmington, 1,018—Lawrence							
Overlook Sanitarium	N&M	Part	35	26	..	...	214
Norristown, 38,181—Montgomery							
Montgomery Hospital	Gen	NPAssn	185	155	45	1,972	4,918
Norristown State Hosp.	Ment	State	4,400	4,275	..	...	721
Sacred Heart Hospital	Gen	Church	66	55	20	693	2,291
Oakbourne (West Chester P. O.), 100—Chester							
Oakbourne Colony Hospital	Epil	NPAssn	140	94	..	...	33
Oil City, 20,379—Venango							
Oil City Hospital	Gen	NPAssn	135	105	20	923	5,092
Palmerton, 7,475—Carbon							
Palmerton Hospital	Gen	NPAssn	65	55	11	453	2,386
Peckville, 8,106—Lackawanna							
Mid-Valley Hospital	Gen	NPAssn	65	48	14	500	1,951
Philadelphia, 1,931,334—Philadelphia							
All Saints Hospital for Treatment of Tuberculosis	TB	Church	101	66	..	...	131
American Hospital for Diseases of the Stomach	Gen	NPAssn	34	25	6	98	913
American Oncologic Hosp.	Sht'n	NPAssn	55	33	..	...	722
Anderson Hospital	Gen	NPAssn	96	76	24	833	5,049
Babies' Hospital	Chl	NPAssn	14	4	1	...	260
Chestnut Hill Hospital	Gen	NPAssn	108	82	36	660	3,360
Children's Heart Hospital	Card	NPAssn	60	59	..	...	137

PENNSYLVANIA—Continued

Hospitals and Sanatoriums	Type of Service	Ownership or Control	Beds	Average Census	Daily Admissions	Number of Births	Admissions
Children's Hospital	Chl	NPAssn	140	130	..	...	3,354
Children's Hospital of the Mary J. Drexel Home	Chl	Church	45	23	..	...	1,013
Columbus Hospital	Gen	Church	52	41	18	660	2,125
Community Hospital	Gen	NPAssn	40	21	12	124	745
Crothers Duffee Hospital	Unit of Hospital of Univ. of Pennsylvania						
Doctors Hospital	Gen	NPAssn	165	108	40	1,060	4,143
Eastern State Penitentiary Hospital	Inst	State	60	14	..	...	791
Episcopal Hospital	Gen	Church	488	334	64	2,817	10,146
Fairmount Farm	N&M	Corp	70	62	..	...	379
Frankford Hospital	Gen	NPAssn	144	113	48	1,402	4,248
Frederick Douglass Memorial Hospital	Gen	NPAssn	84	59	24	548	2,161
Friends Hospital	N&M	NPAssn	170	132	..	...	335
Garretson Hospital	Unit of Temple University Hospital						
Germantown Dispensary and Hospital	Gen	NPAssn	345	288	65	2,125	7,662
Graduate Hospital of the University of Pennsylvania	Gen	NPAssn	461	254	..	...	7,476
Hahnemann Hospital	Gen	NPAssn	601	408	91	2,756	11,910
Hall-Mercer Hospital	Associated with Institute of the Pennsylvania Hospital, Philadelphia						
Hospital of the University of Pennsylvania	Gen	NPAssn	697	580	65	1,784	17,749
Hospital of the Woman's Medical College of Pennsylvania	Gen	NPAssn	167	149	39	1,467	4,885
Institute of the Pennsylvania Hospital	N&M	NPAssn	78	49	..	...	261
Jeanes Hospital	Cancer	NPAssn	80	42	..	...	1,958
Jefferson Medical College Hospital	GenTb	NPAssn	679	661	53	2,123	19,429
Jewish Hospital	Gen	NPAssn	370	330	61	1,867	9,286
Joseph Price Memorial Hosp.	Gen	NPAssn	62	41	11	111	618
Lankenau Hospital	Gen	NPAssn	262	201	36	1,092	6,162
Lying-In Hospital	Unit of Pennsylvania Hospital						
Memorial Hospital	Gen	NPAssn	113	80	30	912	3,235
Mercy Hospital	Gen	NPAssn	194	99	18	517	3,761
Methodist Hospital	Gen	Church	225	151	40	892	5,235
Misericordia Hospital	Gen	Church	260	179	50	1,650	6,366
Mount Sinai Hospital	Gen	NPAssn	262	183	55	1,310	6,369
Nazareth Hospital	Gen	Church	150	127	45	1,506	5,653
Northeastern Hospital	Gen	NPAssn	82	72	20	741	3,256
Northern Liberties Hosp.	Gen	NPAssn	58	46	11	240	2,093
Northwestern General Hosp.	Unit of Temple University Hospital						
Pennsylvania Hospital	Gen	NPAssn	457	339	105	3,000	10,304
Pennsylvania Hospital Department for Mental and Nervous Diseases	N&M	NPAssn	230	175	..	...	350
Philadelphia General Hospital	Gen	City	2,000	2,031	60	2,130	12,053
Philadelphia Hospital for Contagious Diseases	InsTb	City	1,070	182	2	1	2,613
Philadelphia Psychiatric Hospital	N&M	NPAssn	64	56	..	...	458
Philadelphia State Hosp.	Ment	State	6,355	5,992	..	...	614
Physicians and Surgeons Hospital	Gen	NPAssn	50	12	12	234	1,267
Presbyterian Hospital	Gen	Church	567	378	42	921	7,116
Preston Maternity Hospital	Mat	NPAssn	50	13	35	353	484
Rush Hospital for Consumption and Allied Diseases	TB	NPAssn	168	122	..	...	276
St. Agnes Hospital	Gen	Church	340	148	80	1,900	6,780
St. Christopher's Hospital for Children	Chl	NPAssn	60	56	..	...	2,532
St. Joseph's Hospital	Gen	Church	200	132	35	1,051	4,967
St. Luke's and Children's Medical Center	Gen	NPAssn	261	228	66	1,486	9,034
St. Mary's Hospital	Gen	Church	220	190	50	1,749	6,287
St. Vincent's Hospital for Women and Children	Gen	Church	116	80	24	996	1,496
Shriners Hospital for Crippled Children	Orth	NPAssn	120	49	..	...	184
Skin and Cancer Hospital	Sht'n	NPAssn	21	16	..	...	218
Stetson Hospital	Gen	NPAssn	64	41	15	470	1,807
Temple University Hosp.	Gen	NPAssn	556	440	44	2,404	15,664
U. S. Naval Hospital	Gen	Navy	1,272	1,050	97	905	21,807
Urologic Clinic Hospital	Urol	Part	7	7	..	...	300
Wills Hospital	Eye	NPAssn	200	146	..	...	5,932
Wolffe Clinic and Hosp.	MedCard	Part	30	16	..	...	500
Woman's Hospital	Gen	NPAssn	137	104	48	2,057	4,424
Women's Homeopathic Hospital	Gen	NPAssn	178	123	40	701	4,305
Philipsburg, 3,563—Centre							
Benson Sanatorium	Gen	Indiv	25	18	12	254	758
Philipsburg State Hosp.	Gen	State	132	115	18	629	3,508
Phoenixville, 12,262—Chester							
Phoenixville Hospital	Gen	NPAssn	75	73	23	630	2,641
Valley Forge General Hosp.	Gen	Army	2,000	2,025	..	3	7,237
Pittsburgh, 671,659—Allegheny							
Allegheny General Hosp.	Gen	NPAssn	554	453	54	2,873	11,589
Belvedere General Hospital	Gen	NPAssn	98	13	12	132	679
Children's Hospital	Chl	NPAssn	208	166	..	...	5,197
City Tuberculosis Hospital	TB	City	424	305	..	...	648
Elizabeth Steel Magee Hospital	Gen	NPAssn	380	227	121	4,370	9,169
Eye, Ear, Nose and Throat Hospital	ENT	NPAssn	108	85	6	...	3,776
Fairview Sanatorium	N&M	Corp	19	12	..	...	37
Haddon Hospital	Gen	NPAssn	21	9	15	220	237
Mercy Hospital	Gen	Church	680	622	68	2,388	14,855

Key to symbols and abbreviations is on page 1396

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PENNSYLVANIA—Continued

Hospitals and Sanatoriums	Type of Service	Ownership or Control	Beds	Average Census	Number of Births	Admissions
Montefiore Hospital●▲●	Gen	NPAssn	245	203	34	1,884
Municipal Hospital●	Gen	City	224	88	..	1,000
Nazareth Hospital●	Gen	NPAssn	60	53	..	1,287
Pittsburgh Hospital●▲●	Gen	NPAssn	150	101	25	1,450
Presbyterian Hospital●▲●	Gen	NPAssn	225	185	..	1,650
Rosalie Foundling and Maternity Hospital●	Mat Chd	NPAssn	120	120	25	211
St. Francis Hospital●▲●	Gen	NPAssn	450	400	80	9,250
St. John's General Hosp.▲●	Gen	NPAssn	197	165	32	2,213
St. Joseph's Hospital and Dispensary●▲●	Gen	Church	170	100	20	1,200
St. Margaret Memorial Hospital●▲●	Gen	Church	120	65	21	627
Shadyside Hospital●▲●	Gen	NPAssn	250	201	40	1,615
South Side Hospital●▲●	Gen	NPAssn	207	155	33	1,365
Tuberculosis League Hospital●▲●	TB	NPAssn	120	120	..	..
U. S. Marine Hospital●	Gen	USPHS	75	60	..	1,000
Western Pennsylvania Hospital●▲●	Gen	NPAssn	607	455	65	2,047
Western State Penitentiary Hospital	Inst	State	57	34	..	..
Western State Psychiatric Institute and Clinic●▲●	Ment	State	104	127	..	..
Woman's Hospital●	Gen	NPAssn	115	95	..	..
Pittston, 17,525—Luzerne						
Pittston Hospital●●	Gen	NPAssn	120	105	25	900
Polk, 3,600—Venango						
Polk State School	MeDe	State	2,207	2,134	..	..
Port Allegany, 2,325—McKean						
Port Allegany Community Hospital	Gen	NPAssn	17	6	5	165
Pottstown, 22,184—Montgomery						
Hill School Infirmary	Inst	NPAssn	60	6	..	..
Memorial Hospital●	Gen	NPAssn	67	51	15	627
Pottstown Hospital●▲●	Gen	NPAssn	100	75	24	600
Pottsville, 24,529—Schuylkill						
A. C. Milliken Hospital●	Gen	NPAssn	70	71	27	600
Lemon B. Warne Hospital and Clinic●	Gen	NPAssn	75	57	23	540
Pottsville Hospital●▲●	Gen	NPAssn	155	130	27	943
Punxsutawney, 9,602—Jefferson						
Adams Hospital●	Gen	NPAssn	75	74	14	787
Quakertown, 5,139—Bucks						
Quakertown Community Hospital●	Gen	NPAssn	45	30	17	460
Ransom, 150—Lackawanna						
Ransom Mental Hospital	Ment	County	397	Destroyed by fire		
Reading, 110,568—Berks						
Berks County Tuberculosis Sanatorium●	TB	County	142	90	..	..
Community General Hosp.●▲	Gen	NPAssn	125	109	27	540
Reading Hospital●▲●	Gen	NPAssn	350	275	77	5,215
St. Joseph's Hospital●▲●	Gen	Church	125	107	25	1,245
Renovo, 5,704—Clinton						
Renovo Hospital	Gen	NPAssn	24	13	6	210
Retreat, 5,622—Luzerne						
Retreat State Hospital●	Ment	State	1,175	1,130	..	..
Ridgway, 6,332—Elk						
Elk County General Hospital	Gen	NPAssn	70	44	15	215
Ridley Park, 7,057—Delaware						
Taylor Hospital	Gen	NPAssn	70	64	15	675
Roaring Spring, 2,704—Blair						
Nason Hospital	Gen	NPAssn	60	49	15	615
Rochester, 7,641—Beaver						
Rochester General Hospital●	Gen	NPAssn	125	104	28	1,050
St. Marys, 7,482—Elk						
Andrew Keal Memorial Hosp.	Gen	Church	45	31	13	610
Sayre, 7,582—Bradford						
Robert Packer Hospital●▲●	Gen	NPAssn	304	260	21	615
Scranton, 140,404—Lackawanna						
Hahnemann Hospital●●	Gen	NPAssn	100	113	16	1,467
Lackawanna County Tuberculosis Hospital●	TB	County	165	125	..	..
Mercy Hospital●●	Gen	Church	90	81	20	1,201
Moses Taylor Hospital●▲●	Gen	NPAssn	150	98	..	..
St. Joseph's Children's and Maternity Hospital●	Mat Chd	Church	204	185	4	69
St. Mary's Hospital●●	Gen	Church	85	72	15	600
Scranton State Hospital●▲●	Gen	State	250	224	20	1,201
West Side Hospital●▲●	Gen	NPAssn	45	37	10	497
Selinsgrove, 5,115—Bucks						
Grand View Hospital●	Gen	NPAssn	74	70	25	797
Sewickley, 4,614—Allegheny						
Sewickley Valley Hospital●▲●	Gen	NPAssn	151	127	34	1,255
Shamokin, 20,210—Northumberland						
Shamokin State Hospital●	Gen	State	60	61	26	672
Sharon, 15,622—Mercer						
Christian H. Buhl Hosp.▲●	Gen	NPAssn	223	182	44	1,225
Shenandoah, 19,748—Schuylkill						
Locust Mountain State Hosp.▲	Gen	State	70	62	14	770
Somerset, 5,420—Somerset						
Somerset Community Hosp.	Gen	NPAssn	75	68	15	570
South Mountain, 250—Franklin						
Pennsylvania State Sanatorium No. 1 (West Side)●	TB	State	1,700	844	..	..
Spangler, 2,301—Cambria						
Miners' Hospital of Northern Cambria●●	Gen	Corp	70	69	14	600
Spring City, 2,052—Chester						
Pennhurst State School	MeDe	State	2,500	2,500	..	..

PENNSYLVANIA—Continued

Hospitals and Sanatoriums	Type of Service	Ownership or Control	Beds	Average Census	Number of Births	Admissions
State College, 6,226—Centre						
Pennsylvania State College Health Service Hospital	Inst	State	30	7	..	..
Sunbury, 15,482—Northumberland						
Sunbury Community Hospital	Gen	NPAssn	74	66	14	743
Susquehanna, 2,740—Susquehanna						
Simon H. Barnes Memorial Hospital	Gen	NPAssn	18	13	5	90
Tarentum, 9,546—Allegheny						
Allegheny Valley Hospital●▲●	Gen	NPAssn	188	163	40	1,853
Taylor, 9,602—Lackawanna						
Taylor Hospital	Gen	NPAssn	49	43	13	379
Titusville, 8,133—Crawford						
Titusville Hospital●	Gen	NPAssn	65	43	22	496
Torrance, 3,25—Westmorland						
Torrance State Hospital●▲	Ment	State	2,600	2,569	..	..
Union City, 2,843—Erie						
Henry L. Stern Memorial Hospital	Gen	City	29	10	10	275
Uniontown, 21,219—Fayette						
Uniontown Hospital●▲●	Gen	NPAssn	215	214	35	1,908
Warren, 14,661—Warren						
Warren General Hospital	Gen	NPAssn	92	76	22	729
Warren State Hospital●▲●	Ment	State	2,640	2,567	..	..
Washington, 26,105—Washington						
Hillsview Sanitarium	Gen	Corp	49	46	..	..
Washington Hospital●▲●	Gen	NPAssn	198	150	46	1,513
Wawa, 300—Delaware						
Wawa Chest Hospital	TB	NPAssn	16	16	..	..
Waymart, 1,056—Wayne						
Parview State Hospital	Ment	State	1,150	1,145	..	..
Waynesboro, 10,221—Franklin						
Waynesboro Hospital	Gen	NPAssn	78	66	20	722
Waynesburg, 4,891—Greene						
Greene County Memorial Hospital●	Gen	NPAssn	115	110	24	905
Wellsboro, 3,885—Tioga						
Soldiers and Sailors Memorial Hospital	Gen	NPAssn	35	31	17	431
Wernersville, 1,198—Berks						
Wernersville State Hosp.▲	Ment	State	1,600	1,550	..	..
West Chester, 13,280—Chester						
Chester County Hospital●▲●	Gen	NPAssn	151	143	26	700
Darlington Sanitarium	N&M	NPAssn	60	43	..	..
Marshall Square Sanitarium	N&M	Indiv	110	105	..	..
Memorial Hospital of Chester County●	Gen	NPAssn	64	52	14	251
White Haven, 1,885—Luzerne						
White Haven Sanatorium●▲	Unit of Jefferson Medical College Hospital, Philadelphia					
Wilkes-Barre, 86,626—Luzerne						
Mercy Hospital●▲●	Gen	Church	205	190	25	1,188
Wilkes-Barre General Hospital●▲●	Gen	NPAssn	367	263	50	1,575
Wyoming Valley Homeopathic Hospital●	Gen	NPAssn	84	61	25	774
Wilkinsburg, 22,986—Allegheny						
Columbia Hospital●▲●	Gen	Church	171	156	61	1,631
Williamsport, 44,353—Lycoming						
Rothfuss Clinic and Hospital	Gen	Indiv	25	10	10	221
Williamsport Hospital●▲●	Gen	NPAssn	200	237	44	1,958
Windber, 5,027—Somerset						
Windber Hospital	Gen	NPAssn	107	83	10	450
Woodville, 4,626—Allegheny						
Allegheny County Institution District Hospital	Geninst	County	1,767	1,585	..	..
Woodville State Hospital●	Ment	State	2,541	2,454	..	..
York, 56,712—York						
York Hospital●▲●	Gen	NPAssn	196	173	32	2,497

Related Institutions

Bellefonte, 5,304—Centre						
Western State Penitentiary Hospital	Inst	State	18	6	..	..
Broomall, 1,500—Delaware						
Convalescent Hospital	Conv	NPAssn	29	24	..	..
Rest Haven for Convalescents	Conv	Part	69	67	..	..
Bryn Mawr, 10,265—Montgomery						
Bryn Mawr College Infirmary	Inst	NPAssn	20	6	..	..
Cambridge Springs, 1,807—Crawford						
San Rosario Sanitarium	Conv	Church	54	15	..	..
Camp Hill, 8,268—Cumberland						
Pennsylvania Industrial School	Inst	State	32	25	..	..
Chambersburg, 14,652—Franklin						
Chambersburg Maternity Home	Mat	Part	10	8	12	403
Darby, 10,324—Delaware						
St. Francis' Country House	Conv	Church	60	57	..	..
Doylestown, 4,976—Bucks						
Dr. Beekman's Hospital	Conv	Indiv	25	12	..	..
Ebensburg, 3,710—Cambria						
Cambria County Hospital	Inst	County	195	130	..	..
Embreeville, 250—Chester						
Embreeville State Hospital	Ment	State	250	254	..	..
Erie, 116,955—Erie						
Lakeview Hospital	Iso	City	30	15	6	..
Harmarville, 650—Allegheny						
Harmarville Convalescent Home	Conv	NPAssn	45	30	20	..
Harrisburg, 80,339—Dauphin						
Dauphin County Hospital	Inst	County	165	165	..	..

Key to symbols and abbreviations is on page 1396

PENNSYLVANIA—Continued

Related Institutions	Type of Service	Ownership or Control	Beds	Average Census †	Bassinets	Number of Births	Admissions †
Hazleton, 38,009—Luzerne							
St. Joseph Hospital	Mat	Church	25	19	27	718	725
Johnstown, 66,668—Cambria							
Municipal Hospital	Iso	City	44	2	..	...	77
Lancaster, 61,345—Lancaster							
Lancaster County Institution District	Inst	County	241	205	..	...	178
Lewisburg, 3,571—Union							
Ziegler Memorial Infirmary	Inst	NPAssn	22	4	..	...	214
Malvern, 1,686—Chester							
Point Comfort Rest Home	Conv	Indiv	44	34	..	...	96
Mercer, 2,272—Mercer							
Mercer County Home and Hospital	Inst	County	78	75	..	...	88
Middletown, 7,946—Dauphin							
Odd Fellows' Home	Inst	NPAssn	42	42	..	...	37
Morganza, 900—Washington							
Pennsylvania Training School Hospital	Inst	State	40	9	..	...	785
North East, 3,704—Erie							
St. Barnabas' House by the Lake	Conv	Church	35	35	..	...	28
Oakbourne (West Chester P.O.), 100—Chester							
James C. Smith Memorial Home	Conv	Church	21	4	..	...	101
Olyphant, 9,252—Lackawanna							
Blakely Home and Hospital	Ment	County	254	80	..	...	37
Philadelphia, 1,961,534—Philadelphia							
Belle Vista Sanatorium	N&M	Indiv	78	75	..	...	75
Belmont Hospital-Salvation Army Hospital	Mat	Church	10	6	10	200	344
Florence Crittenton Home	Mat	NPAssn	6	2	12	83	111
Philadelphia County Prison Hospital (Holmesburg)	Inst	County	50	20	..	...	411
Philadelphia County Prison Hospital (Reed Street)	Inst	County	34	6	..	...	639
Philadelphia Home for Incurables	Incur	NPAssn	202	230	..	...	30
Pine Hall Convalescent Home	Conv	Indiv	23	19	..	...	27
Sharon Hall	Conv	Corp	56	50	..	...	124
Pittsburgh, 671,659—Allegheny							
Hasley Nursing Home	N&M	Indiv	17	10	..	...	30
Salvation Army Women's Home and Hospital	Mat	Church	8	5	6	87	108
Rochester, 7,441—Beaver							
Passavant Memorial Homes for the Care of Epileptics	Epil	Church	125	105	..	...	3
Scranton, 140,404—Lackawanna							
Municipal Hospital	Iso	City	50	4	9	...	94
Selinsgrove, 2,827—Snyder							
Selinsgrove State Colony for Epileptics	Epil	State	950	907	..	...	102
Somerset, 5,459—Somerset							
Somerset State Hospital	Ment	State	500	450	..	...	40
Towanda, 4,154—Bradford							
Mills Hospital	Gen	Indiv	21	20	8	226	374
Willow Grove, 12,000—Montgomery							
Willow Crest for Convalescents	Conv	NPAssn	77	66	..	...	1,137

RHODE ISLAND

Hospitals and Sanatoriums	Type of Service	Ownership or Control	Beds	Average Census †	Bassinets	Number of Births	Admissions †
Central Falls, 25,248—Providence							
Notre Dame Hospital	Gen	NPAssn	48	16	20	25	675
East Greenwich, 3,842—Kent							
Crawford Allen Memorial Hospital	Unit of Rhode Island Hospital, Providence						
East Providence, 32,165—Providence							
Emma Pendleton Bradley Home	NervChil	NPAssn	54	48	..	...	75
Hillsgrove, 1,000—Kent							
St. Joseph's Hospital	TB	Church	65	40	..	...	12
Howard, 5,000—Providence							
State Hospital for Mental Diseases◇◇	Ment	State	3,150	2,970	4	22	773
State Infirmary△	Gen	State	988	761	20	...	587
Newport, 30,532—Newport							
Newport Hospital△◇	Gen	NPAssn	176	123	46	1,151	4,910
U. S. Naval Hospital◇◇△	Gen	Navy	800	613	14	407	7,885
Pawtucket, 75,797—Providence							
Memorial Hospital◇△	Gen	NPAssn	172	156	30	2,070	7,051
Providence, 253,504—Providence							
Butler Hospital◇△	N&M	NPAssn	174	123	..	...	209
Charles V. Chapin Hospital◇△	TbIsoN&M	City	305	154	..	...	3,232
Jane Brown Memorial Hosp.	Unit of Rhode Island Hospital						
Miriam Hospital△	Gen	NPAssn	65	37	15	300	1,826
Providence Lying In Hosp.◇△	Mat	NPAssn	175	100	175	7,062	8,250
Rhode Island Hospital◇◇△	Gen	NPAssn	559	486	..	...	13,702
Roger Williams General Hospital◇△	Gen	NPAssn	162	141	34	1,411	5,502
St. Joseph's Hospital◇△	Gen	Church	310	226	50	1,600	7,779
Quonset Point,—Washington							
U. S. Naval Air Station Dispensary	Gen	Navy	200	54	..	...	1,801
Wakefield, 4,000—Washington							
South County Hospital△	Gen	NPAssn	46	30	11	464	1,456
Wallum Lake, 100—Providence							
State Sanatorium◇△	TB	State	611	346	..	...	278

RHODE ISLAND—Continued

Hospitals and Sanatoriums	Type of Service	Ownership or Control	Beds	Average Census †	Bassinets	Number of Births	Admissions †
Westerly, 11,109—Washington							
Westerly Hospital△	Gen	NPAssn	61	44	20	618	2,066
Woonsocket, 49,376—Providence							
Woonsocket Hospital△	Gen	NPAssn	147	94	37	1,704	4,763
Related Institutions							
Hoxsie, 135—Kent							
Lakeside Home and Mary Murray Preventorium	TB	NPAssn	50	45	..	...	137
La Fayette, 628—Washington							
Exeter School	MrDe	State	875	803	..	...	81
Providence, 253,504—Providence							
St. Elizabeth Home for Incurable Women	Incur	Church	70	69	..	...	50

SOUTH CAROLINA

Hospitals and Sanatoriums	Type of Service	Ownership or Control	Beds	Average Census †	Bassinets	Number of Births	Admissions †
Abbeville, 4,930—Abbeville							
Abbeville County Memorial Hospital	Gen	CyCo	21	11	11	215	856
Aiken, 6,168—Aiken							
Aiken County Hospital△	Gen	County	70	47	10	446	2,530
Anderson, 19,474—Anderson							
Anderson County Memorial Hospital◇	Gen	NPAssn	255	198	32	1,480	6,62[illegible]
St. Mary's Hospital	Gen	NPAssn	40	15	8	31	309
Beaufort, 3,185—Beaufort							
Beaufort County Hospital	Gen	County	40	21	12	171	1,413
Bennettsville, 4,895—Marlboro							
Marlboro County General Hospital△	Gen	NPAssn	80	50	20	504	3,412
Camden, 5,747—Kershaw							
Camden Hospital△◇	Gen	NPAssn	76	49	13	569	2,601
Charleston, 71,275—Charleston							
Baker Memorial Sanatorium△	Gen	NPAssn	60	50	15	419	2,568
Pinehaven Sanatorium	TB	County	75	65	..	...	172
Roper Hospital◇◇△◇	Gen	NPAssn	296	240	40	1,272	10,294
St. Francis Xavier Infirmary△◇	Gen	Church	111	98	26	1,322	4,260
U. S. Naval Hospital◇◇△	Gen	Navy	450	256	19	361	6,981
Chester, 6,392—Chester							
Chester County Hospital	Gen	County	53	30	15	334	1,616
Clinton, 5,704—Laurens							
Hays Hospital	Gen	Indiv	30	10	6	205	883
Columbia, 62,396—Richland							
Columbia Hospital◇◇△◇	Gen	County	437	331	60	1,502	11,650
Good Samaritan-Waverly Hospital◇	Gen	NPAssn	70	36	14	169	940
Moore Clinic Hospital	Orth	Corp	18	13	..	...	264
Providence Hospital△	Gen	Church	96	80	26	992	3,586
Ridgewood Tuberculosis Sanatorium	TB	NPAssn	56	37	..	...	56
South Carolina Baptist Hospital◇	Gen	Church	100	98	9	576	4,360
South Carolina State Hosp.◇	Ment	State	4,928	4,842	..	...	1,032
Veterans Admin. Hospital◇△	Gen	Vet	700	589	..	...	5,600
Waverley Sanitarium	N&M	Corp	25	25	..	...	111
Conway, 5,005—Horry							
Conway Hospital△	Gen	NPAssn	65	49	19	801	4,444
Dillon, 3,867—Dillon							
St. Eugene Hospital	Gen	Church	41	30	15	454	1,785
Florence, 16,054—Florence							
Florence-Darlington Tuberculosis Sanatorium	TB	Counties	80	68	..	...	97
McLeod Infirmary◇△◇	Gen	NPAssn	200	161	30	758	7,461
South Carolina Public Health Hospital	Ven	State	250	130	40	...	5,800
Fort Jackson,—Richland							
Station Hospital△	Gen	Army	500	152	18	294	6,805
Gaffney, 7,628—Cherokee							
Cherokee County Hospital	Gen	County	50	46	8	488	2,619
Greenville, 34,734—Greenville							
Greenville County Tuberculosis Sanatorium	TB	County	75	66	..	...	54
Greenville General Hosp.◇◇△◇	Gen	NPAssn	321	277	31	2,256	11,200
Dr. Jervey's Private Hospital ENT		Indiv	13	3	..	...	430
St. Francis Hospital△	Gen	Church	115	90	20	1054	4,459
Shriners Hospital for Crippled Children◇△	Orth	NPAssn	40	32	..	...	231
Station Hospital	Gen	Army	100	39	..	...	1,065
Working Benchmen Hospital	Gen	NPAssn	22	7	4	68	390
Greenwood, 13,020—Greenwood							
Brewer Hospital	Gen	NPAssn	32	19	4	...	768
Greenwood Hospital△	Gen	NPAssn	85	55	18	712	3,028
Hartsville, 5,200—Darlington							
Byerly Hospital	Gen	NPAssn	74	48	18	537	3,201
Hemingway, 550—Williamsburg							
Johnson Memorial Hospital	Gen	Indiv	56	38	10	772	1,625
Kingstree, 3,182—Williamsburg							
Kelley Memorial Hospital	Gen	Corp	55	23	13	257	1,583
Lake City, 2,322—Florence							
Whitehead Infirmary	Gen	Indiv	13	12	5	207	608
Lancaster, 4,430—Lancaster							
Marion Sims Memorial Hosp.◇	Gen	NPAssn	50	44	16	804	2,791
Laurens, 6,804—Laurens							
Laurens County Hospital	Gen	County	62	36	17	282	1,200
Moncks Corner, 1,165—Berkeley							
Berkeley County Hospital	Gen	NPAssn	46	17	12	217	849

Key to symbols and abbreviations is on page 1380

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SOUTH CAROLINA—Continued

Hospitals and Sanatoriums	Type of Service	Ownership or Control	Beds	Average Census	Bassinets	Number of Births	Admissions
Mullins, 4,392—Marion							
Martin Private Hospital	Gen	Indiv	45	10	8	157	1,631
Mullins Hospital◇	Gen	NPAssn	65	40	19	661	2,998
Newberry, 7,580—Newberry							
Newberry County Hospital	Gen	County	30	26	12	365	1,634
Orangeburg, 10,521—Orangeburg							
Tri-County Hospital▪▲◇	Gen	City	172	127	24	752	5,334
Urological Institute	Unit of Tri-County Hospital						
Parris Island, 256—Beaufort							
U. S. Naval Hospital▲◇	Gen	Navy	150	70	4	144	1,680
Ridgeland, 1,021—Jasper							
Ridgeland Hospital	Gen	NPAssn	38	12	10	184	1,297
Rock Hill, 15,609—York							
Dunlap Hospital	Gen	Indiv	14	2	..	...	302
St. Philip's Mercy Hospital	Gen	Church	65	67	18	604	5,049
York County Hospital▲◇	Gen	County	79	77	14	686	3,838
Seneca, 2,155—Oconee							
Oconee County Hospital	Gen	NPAssn	45	28	10	708	2,844
Spartanburg, 32,249—Spartanburg							
Mary Black Memorial Hosp.▲◇	Gen	NPAssn	60	48	9	178	2,900
Spartanburg General Hosp.▲◇	Gen TB	County	296	268	57	2,341	10,477
State Park, 100—Richland							
Palmetto Sanatorium	Unit of South Carolina Sanatorium						
South Carolina Sanatorium▪	TB	State	550	425	..	...	545
Summerville, 3,025—Dorchester							
Dorchester County Hospital	Gen	County	52	22	16	213	1,301
Sumter, 15,574—Sumter							
Tuomey Hospital▲◇	Gen	NPAssn	150	120	32	1,130	6,446
Travellers Rest, 1,200—Greenville							
Coleman Hospital	Gen	Indiv	23	10	5	152	719
Union, 8,478—Union							
Wallace Thomson Hospital	Gen	City	29	22	11	469	1,802
Walterboro, 3,373—Colleton							
Colleton County Hospital	Gen	County	72	45	20	252	2,176
Woodruff, 3,268—Spartanburg							
Workman Memorial Hospital	Gen	Indiv	14	10	5	127	615
Related Institutions							
Clinton, 5,704—Laurens							
State Training School	MeDe	State	996	971	1	2	56
Newberry, 7,510—Newberry							
People's Hospital	Gen	NPAssn	15	6	3	22	284

SOUTH DAKOTA

Hospitals and Sanatoriums	Type of Service	Ownership or Control	Beds	Average Census	Bassinets	Number of Births	Admissions
Aberdeen, 17,015—Brown							
St. Luke's Hospital▲◇	Gen	Church	235	198	50	1,186	7,621
Belle Fourche, 2,496—Butte							
John Burns Memorial Hosp.	Gen	NPAssn	25	8	8	90	415
Britton, 1,569—Marshall							
Britton General Hospital	Gen	Church	24	17	9	251	1,103
Brookings, 5,346—Brookings							
Brookings Municipal Hospital	Gen	City	39	32	12	346	1,638
Burke, 602—Gregory							
Burke Hospital	Gen	NPAssn	17	13	8	149	856
Cheyenne Agency, 121—Dewey							
Cheyenne River Indian Hosp.	Gen	IA	40	19	6	71	370
Deadwood, 4,100—Lawrence							
St. Joseph's Hospital▲	Gen	Church	64	68	12	357	1,704
Dell Rapids, 1,706—Minnehaha							
Dell Rapids Hospital	Gen	Part	20	12	6	83	436
Eureka, 1,457—McPherson							
Eureka Community Hospital	Gen	NPAssn	26	22	8	211	1,415
Flandreau, 2,212—Moody							
Flandreau Municipal Hospital	Gen	City	18	12	4	112	505
Fort Meade,—Meade							
Veterans Admin. Hospital	Ment	Vet	720	647	..	...	178
Fort Thompson, 80—Buffalo							
Crow Creek Indian Hospital	Gen	IA	20	14	5	19	301
Gregory, 1,746—Gregory							
Mother of Grace Hospital	Gen	Church	17	12	7	134	745
Hot Springs, 4,083—Fall River							
Lutheran Hospital	Gen	Church	50	44	11	154	1,240
Our Lady of Lourdes Hospital and Sanitarium	Gen	Church	53	39	11	131	1,353
Veterans Admin. Hospital▲	Gen	Vet	270	255	..	....	2,266
Hoven, 360—Potter							
Holy Infant Hospital	Gen	Church	27	17	6	102	762
Huron, 10,845—Beadle							
St. John's Hospital▲◇	Gen	Church	150	...	35	Estab.	1947
Sprague Hospital	Gen	NPAssn	60	53	16	378	2,926
Igloo, 3,880—Fall River							
Station Hospital	Gen	Army	30	4	6	60	390
Lead, 7,536—Lawrence							
Homestake Hospital▲	Gen	NPAssn	25	12	5	9	510
Madison, 5,018—Lake							
Madison Community Hosp.▲	Gen	NPAssn	60	37	12	306	1,713
Milbank, 2,745—Grant							
St. Bernard's Providence Hospital	Gen	Church	31	19	8	234	887
Mitchell, 10,633—Davison							
Methodist State Hospital▲◇	Gen	Church	100	112	15	447	4,108
St. Joseph's Hospital▲◇	Gen	Church	119	116	20	554	3,980
Mobridge, 3,686—Walworth							
Lowe Hospital	Gen	Indiv	20	12	6	156	701
Mobridge Hospital	Gen	NPAssn	35	23	7	300	1,125
Parkston, 1,535—Hutchinson							
St. Benedict Hospital	Gen	Church	35	19	12	267	979

SOUTH DAKOTA—Continued

Hospitals and Sanatoriums	Type of Service	Ownership or Control	Beds	Average Census	Bassinets	Number of Births	Admissions
Pierre, 4,322—Hughes							
St. Mary's Hospital▲◇	Gen	Church	115	91	20	456	5,970
Pine Ridge, 618—Shannon							
Pine Ridge Indian Hospital	Gen	IA	53	47	13	146	1,724
Rapid City, 13,844—Pennington							
Black Hills General Hosp.▲	Gen	NPAssn	57	48	14	198	1,886
St. John's McNamara Hosp.▲◇	Gen	Church	100	97	25	650	3,956
Sioux Sanatorium▲	TB	IA	130	119	..	...	300
Redfield, 2,428—Spink							
Baldwin Community Hospital	Gen	City	15	11		151	631
Rosebud, 258—Todd							
Rosebud Indian Hospital	Gen	IA	40	26	7	108	1,007
Sanator, 10—Custer							
South Dakota State Sanatorium for Tuberculosis▲	TB	State	192	140	..	...	109
Sioux Falls, 40,831—Minnehaha							
McKennan Hospital▪▲◇	Gen	Church	164	140	50	1,143	6,861
Sioux Valley Hospital▪▲◇	Gen	NPAssn	190	190	30	1,121	6,789
Sisseton, 2,313—Roberts							
Sisseton Indian Hospital	Gen	IA	32	19	8	57	710
Tekakwitha Hospital	Gen	Church	40	30	11	68	708
Volga, 622—Brookings							
Volga Hospital	Gen	NPAssn	18	9	8	153	466
Watertown, 10,617—Codington							
Bartron Hospital▲◇	Gen	NPAssn	75	58	14	419	2,995
Lutheran Hospital▲	Gen	Church	67	55	13	477	2,753
Webster, 2,175—Day							
Peabody Memorial Hospital▲	Gen	NPAssn	50	28	12	228	1,622
Wessington Springs, 1,252—Jerould							
Memorial Hospital	Gen	County	23	...	5	Estab.	1947
Yankton, 6,798—Yankton							
Sacred Heart Hospital▲◇	Gen	Church	170	141	21	642	5,160
Yankton State Hospital	Ment	State	1,888	1,635	..	...	472
Related Institutions							
Garretson, 666—Minnehaha							
DeVall Hospital	Gen	Indiv	10	1	2	16	50
Hot Springs, 4,083—Fall River							
State Soldiers' Home Hosp.	Inst	State	25	18	..	...	219
Redfield, 2,428—Spink							
State School and Home for Feebleminded	MeDe	State	730	730	..	...	93
Viborg, 669—Turner							
Viborg Hospital	Gen	Indiv	11	7	5	80	311
Wagner, 1,319—Charles Mix							
Duggan Hospital	Gen	Indiv	12	10	4	127	480
Yankton Indian Hospital	Gen	IA	25	14	5	61	536

TENNESSEE

Hospitals and Sanatoriums	Type of Service	Ownership or Control	Beds	Average Census	Bassinets	Number of Births	Admissions
Athens, 6,900—McMinn							
Epperson Clinic-Hospital	Gen	Indiv	60	26	9	300	1,662
Foree Hospital	Gen	Part	38	22	12	442	1,306
Bristol, 14,804—Sullivan							
Hooks-English Infirmary	ENT	Part	10	2	..	...	553
Brownsville, 4,012—Haywood							
Haywood County Memorial Hospital	Gen	NPAssn	35	20	12	300	1,441
Chattanooga, 128,163—Hamilton							
Baroness Erlanger Hospital▪▲◇	Gen	CyCo	400	343	85	3,009	13,326
Barton Clinic-Hospital	Gen	Indiv	18	...	..	Estab.	1947
Doyle Curvey Clinic-Hospital	Gen	Indiv	25	...	10	Estab.	1947
Earl R. Campbell Clinic-Hosp.	Gen	Corp	22	20	7	215	4,300
East Tennessee Medical Center	Ven	State	200	103	..	....	4,850
Newell Hospital▲	Gen	Part	53	41	5	68	1,800
Physicians and Surgeons Hosp.	Gen	Indiv	23	14	12	511	1,052
Pine Breeze Sanatorium▪▲	TB	NPAssn	177	160	..	...	190
T. C. Thompson Children's Hospital▪▲◇	Chl	CyCo	60	48	25	....	1,867
West Ellis Hospital	Unit of Baroness Erlanger Hospital						
Woman's Clinic-Hospital	Gen	Indiv	58	30	28	719	1,248
Clarksville, 11,631—Montgomery							
Clarksville Hospital	Gen	NPAssn	44	34	16	576	1,394
Cleveland, 11,551—Bradley							
Physicians and Surgeons Hosp.	Gen	Indiv	24	11	4	126	848
Speck Hospital	Gen	NPAssn	25	15	15	575	1,304
Columbia, 10,579—Maury							
Kings Daughters Hospital	Gen	NPAssn	50	32	8	333	2,836
Dayton, 1,870—Rhea							
Broyles Hospital	Gen	Indiv	12	4	4	108	261
Thomison Hospital	Gen	Indiv	10	6	4	52	225
Dyersburg, 10,084—Dyer							
Baird-Brewer General Hosp.▲	Gen	Corp	44	25	12	349	2,008
Elizabethton, 8,516—Carter							
St. Elizabeth General Hosp.	Gen	Corp	40	29	12	652	1,706
Erwin, 3,950—Unicoi							
Erwin Community Hospital	Gen	NPAssn	15	9	9	248	824
Franklin, 4,139—Williamson							
Dan German Hospital	Gen	Part	18	18	8	345	1,305
Greeneville, 6,784—Greene							
Campbell's Hospital	Gen	Indiv	6	4	3	34	230
Greeneville Sanatorium and Hospital▲	Gen	Corp	50	32	16	298	1,548
Laughlin Clinic-Hospital	Gen	Indiv	30	25	10	347	1,153
Learline Reaves Sanatorium	TB	State	32	27	..	...	107
Takoma Hospital and Sanitarium▲	Gen	NPAssn	32	30	12	317	2,140

Key to symbols and abbreviations is on page 1396

TENNESSEE—Continued

Hospitals and Sanatoriums	Type of Service	Ownership or Control	Beds	Average Census †	Bassinets	Number of Births	Admissions †
Harriman, 5,620—Roane							
Harriman Hospital	Gen	City	41	30	8	449	1,783
Humboldt, 5,103—Gibson							
Ourzier Clinic Hospital	Gen	Indiv	10	4	4	...	400
St. Mary's Hospital	Gen	Church	50	19	10	405	1,256
Jackson, 24,332—Madison							
Doctors Hospital	Gen	Part	25	18	6	215	1,000
Fitts-White Hospital	Gen	Part	46	31	16	327	1,691
Memorial Hospital	Gen	NPAssn	35	19	10	247	1,341
Webb-Williamson Hospital-Clinic	Gen	Corp	29	26	6	605	1,600
Johnson City, 25,332—Washington							
Appalachian Hospital△	Gen	NPAssn	72	79	20	1,206	4,650
Budd Clinic and Hospital	Gen	Indiv	12	9	3	69	394
Campbell's Eye, Ear, Nose and Throat Hospital	ENT	Indiv	10	2	..	...	850
Jones Eye, Ear, Nose and Throat Hospital△	ENT	Part	27	14	..	...	1,602
Kingsport, 14,864—Sullivan							
Holston Valley Community Hospital△	Gen	NPAssn	114	103	33	1,946	6,234
Knoxville, 111,580—Knox							
Beverly Hills Sanatorium	TB	CyCo	145	70	..	...	91
Dr. H. E. Christesberry Eye, Ear, Nose and Throat Infirmary	ENT	Indiv	12	4	..	...	1,500
Eastern State Hospital	Ment	State	2,000	1,911	..	...	627
Fort Sanders Hospital△◇	Gen	NPAssn	200	198	45	2,287	8,041
Kingston Pike Hospital	Gen	Part	35	30	6	27	1,413
Knoxville General Hosp.◇△◇	Gen	City	285	203	40	1,548	8,976
St. Mary's Memorial Hosp.△◇	Gen	Church	125	126	25	1,372	6,206
La Follette, 4,010—Campbell							
Doctor's Hospital	Gen	Indiv	17	8	6	146	423
La Follette Hospital	Gen	Indiv	23	12	6	272	882
Lawrenceburg, 3,807—Lawrence							
Lawrenceburg Hospital	Gen	Church	43	26	9	480	1,980
Lebanon, 3,956—Wilson							
Martha Gaston Hospital	Gen	Indiv	25	16	10	314	1,413
McFarland Hospital	Gen	Indiv	35	43	6	551	1,700
Lewisburg, 3,582—Marshall							
Gordon Hospital	Gen	Corp	48	27	7	102	1,497
Wheat Memorial Hospital	Gen	Indiv	13	7	6	134	515
Loudon, 3,017—Loudon							
Charles H. Bacon Hospital	Gen	County	30	16	14	430	1,060
Madison College, 510—Davidson							
Madison Rural Sanitarium and Hospital◇△	Gen	NPAssn	165	139	20	464	3,766
Maryville, 5,020—Blount							
Blount Memorial Hosp.	Gen	NPAssn	50	...	25	Estab. 1947	
Memphis, 292,942—Shelby							
Baptist Memorial Hosp.◇△◇	Gen	Church	510	449	60	1,999	18,146
Carrol Turner Sanatorium	N&M	Indiv	28	26	..	...	513
Collins Chapel Connectional Hospital	Gen	Church	65	50	15	153	1,305
Crippled Children's Hospital-School	Orth	NPAssn	40	33	..	...	108
Gailor Memorial Psychiatric Hospital	Ment	State	40	31	..	...	366
Gartly-Ramsay Hospital△	N&M	Corp	50	43	..	...	1,420
Hospital for Crippled Adults△	Orth	NPAssn	66	58	..	...	470
John Gaston Hospital◇△◇	Gen	City	490	500	61	2,606	17,612
McLemore Clinic Hospital	Gen	Corp	53	44	10	222	1,824
Memphis Eye, Ear, Nose and Throat Hospital◇△	ENT	Church	60	32	..	...	2,792
Methodist Hospital◇△◇	Gen	Church	250	256	50	3,174	12,252
Psychiatric Hospital	Unit of Western State Hospital, Western State Hospital, Tenn.						
St. Joseph Hospital◇△◇	Gen	Church	280	300	80	2,300	11,369
U. S. Marine Hospital△	Gen	USPHS	130	105	..	...	1,604
U. S. Naval Hospital△	Gen	Navy	1,467	1,128	96	1	5,255
Veterans Admin. Hospital△	Gen	Vet	300	281	..	...	2,728
Veterans Admin. Hospital (Kennedy)◇△	Gen	Vet	1,436	1,131	..	...	10,295
Wallace Sanitarium	N&M	Indiv	50	39	..	...	1,066
West Tennessee Medical Center	Ven	State	250	90	..	...	4,500
Willis C. Campbell Clinic Hospital◇△	Orth	Part	60	55	..	...	1,620
Milan, 5,025—Gibson							
Milan Hospital	Gen	NPAssn	20	10	10	59	879
Morristown, 8,650—Hamblen							
Hamblen Hospital	Gen	NPAssn	35	15	11	341	1,650
Walters Clinic Hospital	Gen	Indiv	30	15	8	292	1,052
Mountain Home, 250—Washington							
Veterans Admin. Center△	Gen	Vet	600	550	..	...	5,555
Murfreesboro, 9,465—Rutherford							
Rutherford Hospital△	Gen	NPAssn	45	38	12	554	1,703
Veterans Admin. Hospital△	Ment	Vet	1,258	904	..	...	841
Nashville, 167,402—Davidson							
Central State Hospital	Ment	State	2,000	1,501	..	...	480
City View Sanitarium	N&M	Indiv	55	35	..	...	570
Davidson County Hospital	Ment	County	800	754	8	81	1,121
Davidson County Tuberculosis Hospital△	TB	County	300	208	..	...	315
Geo. W. Hubbard Hospital of Meharry Medical Coll.◇△◇	Gen	NPAssn	160	117	21	729	2,986
Hospital for the Criminal Insane	Unit of Central State Hospital						
Middle Tennessee Tuberculosis Hospital	TB	State	54	46	..	...	346
Mid-State Baptist Hosp.◇△	Gen	NPAssn	112	97	30	1,162	6,336
Nashville General Hosp.◇△◇	Gen	City	380	135	35	1,230	7,319

TENNESSEE—Continued

Hospitals and Sanatoriums	Type of Service	Ownership or Control	Beds	Average Census †	Bassinets	Number of Births	Admissions †
Riverside Sanitarium and Hospital	Gen	Church	26	19	2	37	388
St. Thomas Hospital◇△◇	Gen	Church	213	185	35	2,250	9,105
Vanderbilt University Hospital◇△◇	Gen	NPAssn	332	251	88	1,801	8,826
Veterans Admin. Hospital◇△	Gen	Vet	500	379	..	...	3,230
Oak Ridge,—Anderson							
Oak Ridge Hospital◇△	Gen	NPAssn	337	154	45	1,111	9,591
Oakville, 163—Shelby							
Oakville Memorial Sanat.◆	TB	CyCo	375	314	..	...	477
Paris, 6,956—Henry							
Mcswain Clinic Hospital	Gen	Indiv	24	10	4	126	548
Nobles Memorial Hospital	Gen	Part	25	18	7	188	1,118
Pleasant Hill, 178—Cumberland							
"Uplands" Cumberland Mountain Hosp. and Sanatorium	Gen	NPAssn	50	34	5	141	740
Pressmen's Home, 200—Hawkins							
International Printing Pressmen and Assistants' Union Sanatorium	TB	NPAssn	40	25	..	...	10
Pulaski, 5,314—Giles							
Pulaski Hospital	Gen	Indiv	25	12	4	224	970
Cheerfield Farm Preventorium	Unit of Oakville Memorial Sanatorium, Oakville						
Rockwood, 5,981—Roane							
Chamberlain Memorial Hosp.	Gen	NPAssn	50	28	10	330	1,546
Rogersville, 3,018—Hawkins							
Lyons Hospital	Gen	Indiv	15	10	6	190	444
Sevierville, 1,161—Sevier							
Broady Hospital	Gen	Indiv	11	4	3	186	391
Wilson Hospital	Gen	Indiv	32	9	6	163	608
Sewanee, 1,000—Franklin							
Emerald-Hodgson Hospital	Gen	Church	50	22	10	168	1,407
Springfield, 6,668—Robertson							
Robertson County Hospital	Gen	County	25	15	9	400	800
Sweetwater, 3,500—Monroe							
Sweetwater Hospital△	Gen	NPAssn	30	16	8	557	1,314
Union City, 7,256—Obion							
Union City Clinic-Hospital	Gen	Corp	15	2	3	221	1,080
Western State Hospital,—Hardeman							
Western State Hospital△	Ment	State	2,512	2,224	..	...	523
Woodbury, 665—Cannon							
Good Samaritan Hospital	Gen	Indiv	42	33	10	288	1,673

Related Institutions

Chattanooga, 128,163—Hamilton							
William L. Bork Memorial Hospital	Ment	County	300	250	..	...	94
Donelson, 1,500—Davidson							
Tennessee Home and Training School for Feebleminded Persons	MeDe	State	608	720	..	...	51
Fayetteville, 4,684—Lincoln							
Lincoln County Hospital	Gen	County	41	29	14	525	2,051
Johnson City, 25,323—Washington							
McKee-Wilson Eye Hospital	Eye	Part	15	8	..	...	448
Knoxville, 111,580—Knox							
Tennessee School for Deaf	Inst	State	20	1	..	...	370
University of Tennessee Hosp.	Inst	State	35	6	..	...	582
Memphis, 292,942—Shelby							
Dr. Henry G. Hill Clinic-Hosp.	Orth	Indiv	10	6	..	...	300
Shelby County Hospital	Inst	County	685	471	..	...	373
Nashville, 167,402—Davidson							
Junior League Home for Crippled Children	Orth	NPAssn	40	40	..	...	81
Tennessee State Penitentiary Hospital	Inst	State	104	No data supplied			
Shelbyville, 6,537—Bedford							
Bedford County Hospital	Gen	NPAssn	38	16	6	250	1,570

TEXAS

Hospitals and Sanatoriums	Type of Service	Ownership or Control	Beds	Average Census †	Bassinets	Number of Births	Admissions †
Abilene, 26,612—Taylor							
Abilene State Hospital	Epil	State	1,284	1,321	..	...	177
Hendrick Memorial Hosp.△◇	Gen	Church	158	109	25	1,269	6,397
St. Ann Hospital	Gen	Church	33	28	14	377	2,200
Alice, 7,792—Jim Wells							
Physicians and Surgeons Hosp.	Gen	Corp	45	33	14	580	2,765
Alvin, 3,067—Brazoria							
Alvin Memorial Hospital	Gen	Indiv	16	9	6	55	748
Amarillo, 51,686—Potter							
Northwest Texas Hospital◇	Gen	County	150	138	40	1,381	6,586
Potter County Tuberculosis Cottage	Unit of Northwest Texas Hospital						
St. Anthony's Hospital△◇	Gen	Church	127	103	26	775	5,437
Veterans Admin. Hospital	Gen	Vet	187	171	..	...	2,172
Andrews, 611—Andrews							
Andrews County Hospital	Gen	County	15	5	5	98	547
Atlanta, 2,453—Cass							
Ellington Memorial Hospital	Gen	Part	12	6	6	197	698
Austin, 87,930—Travis							
Austin State Hospital	Ment	State	2,810	2,864	..	...	1,241
Austin-Travis County Tuberculosis Sanatorium	TB	CyCo	48	39	..	...	72
Brackenridge Hospital◇△	Gen	City	297	185	35	1,349	6,886
Holy Cross Hospital	Gen	Church	19	12	7	266	817
St. David's Hospital	Gen	Church	61	47	20	718	3,501

Key to symbols and abbreviations is on page 1366

TEXAS—Continued

Hospitals and Sanatoriums	Type of Service	Ownership or Control	Beds	Average Census †	Bassinets	Number of Births	Admissions †
Seton Hospital△◇	Gen	Church	85	74	34	1,156	4,210
Station Hospital	Gen	Army	25	12	..	...	790
Baird, 1,810—Callahan							
Callahan County Hospital	Gen	County	23	5	5	135	870
Ballinger, 4,672—Runnels							
Bailey Clinic-Hospital	Gen	Indiv	15	9	7	180	630
Bastrop, 1,976—Bastrop							
F. A. Organ Hospital	Gen	Part	12	4	7	92	294
Bay City, 4,504—Matagorda							
Matagorda General Hospital	Gen	County	45	23	14	291	1,804
Beaumont, 59,061—Jefferson							
Beaumont Municipal Hospital	Gen	City	40	30	10	164	1,309
Hotel Dieu Hospital△◇	Gen	Church	125	100	..	...	4,974
Jefferson County Tuberculosis Hospital No. 1	TB	County	150	115	..	...	125
Jefferson County Tuberculosis Hospital No. 2	Unit of Jefferson County Tuberculosis Hospital No. 1						
St. Therese Hospital△◇	Gen	Church	123	70	30	1,533	4,496
Beeville, 6,700—Bee							
Beeville Hospital and Clinic	Gen	Indiv	40	27	10	171	872
Thomas Memorial Hospital	Gen	Corp	21	10	8	193	967
Bellville, 1,347—Austin							
Bellville Hospital	Gen	Part	10	7	4	144	695
Belton, 3,579—Bell							
Sewell Hospital	Gen	Part	20	9	6	341	673
Big Spring, 12,604—Howard							
Big Spring Hospital	Gen	Corp	40	25	6	243	1,975
Big Spring State Hospital	Ment	State	457	441	..	...	157
Cowper-Sanders Clinic and Hospital	Gen	Indiv	36	30	11	261	1,256
Malone and Hogan Clinic-Hospital	Gen	Part	41	34	17	155	1,916
Bianco, 453—Pecos							
Hospital in the Hills	Gen	Part	12	4	3	74	298
Bonham, 6,340—Fannin							
S. B. Allen Memorial Hosp.	NPAssn		32	17	10	370	1,095
Medical and Surgical Clinic-Hospital	Gen	Corp	28	...	8	Estab. 1947	
Borger, 10,018—Hutchinson							
Casa Serena Hospital	Gen	NPAssn	12	4	3	42	343
North Plains Hospital	Gen	County	100	58	21	720	2,600
Bowie, 3,470—Montague							
Bowie Clinic Hospital	Gen	Corp	27	21	10	150	1,179
Brady, 5,892—McCulloch							
Brady Hospital	Gen	Part	60	34	11	302	1,721
Brenham, 6,635—Washington							
St. Francis Hospital	Gen	Church	25	14	7	135	792
Sarah B. Milroy Memorial Hospital	Gen	Corp	32	13	8	171	857
Bridgeport, 1,735—Wise							
Bridgeport Hospital	Gen	Part	10	...	4	Estab. 1947	
Brownfield, 4,860—Terry							
Treadaway-Daniell Hospital	Gen	Part	22	12	10	326	1,340
Brownsville, 22,053—Cameron							
Mercy Hospital△	Gen	Church	50	33	18	538	2,714
Brownwood, 13,256—Brown							
Brownwood Memorial Hosp.	Gen	NPAssn	72	31	23	711	3,039
Medical Arts Hospital	Gen	NPAssn	42	19	8	189	1,378
Bryan, 11,842—Brazos							
Bryan Hospital	Gen	Indiv	26	18	8	360	1,350
St. Joseph Hospital	Gen	Church	25	17	10	580	1,149
Burnet, 1,945—Burnet							
Shepperd Hospital	Gen	Indiv	17	15	6	140	1,600
Burton, 350—Washington							
Burton Hospital	Gen	Indiv	9	5	4	61	394
Cameron, 5,048—Milam							
Newton Memorial Hospital	Gen	NPAssn	50	14	8	85	1,332
Camp Hood,—Bell							
Station Hospital	Gen	Army	150	147	18	267	4,108
Canadian, 2,151—Hemphill							
Canadian Hospital	Gen	Indiv	8	5	4	97	292
Canyon, 2,607—Randall							
Neisett Hospital	Gen	Indiv	20	13	12	168	787
Center, 3,010—Shelby							
Center Sanitarium	Gen	Indiv	18	6	5	276	792
Warren Hospital	Gen	Part	16	3	6	132	677
Childress, 6,464—Childress							
Childress General Hospital	Gen	County	20	...	6	Estab. 1948	
Jeter-Townsend Hospital	Gen	Part	20	10	6	201	578
Cisco, 4,468—Eastland							
Graham Sanitarium	Gen	Indiv	22	5	5	103	715
Clarksville, 4,695—Red River							
Red River County Hospital	Gen	County	26	11	6	281	1,003
Cleburne, 10,556—Johnson							
Cleburne Hospital	Gen	Indiv	28	15	8	375	1,227
Johnson County Memorial Hospital	Gen	County	50	...	8	Estab. 1948	
Knox Hospital	Gen	Part	10	3	10	254	440
Clifton, 1,732—Bosque							
Goodall and Witcher Clinic-Hospital	Gen	Part	25	11	6	159	782
Coleman, 6,084—Coleman							
Overall Memorial Hospital	Gen	CyCo	50	15	8	284	1,491
College Station, 3,184—Brazos							
Agricultural and Mechanical College Hospital	Inst	State	150	14	..	...	1,818
Colorado City, 5,813—Mitchell							
Root Memorial Hospital	Gen	Indiv	28	15	10	217	1,151
Columbus, 2,422—Colorado							
Columbus Hospital and Clinic	Gen	Part	20	9	5	64	746

TEXAS—Continued

Hospitals and Sanatoriums	Type of Service	Ownership or Control	Beds	Average Census †	Bassinets	Number of Births	Admissions †
Commerce, 4,609—Hunt							
Allen Hospital	Gen	Indiv	10	8	5	102	535
Leberman Clinic and Hospital	Gen	Indiv	12	12	6	141	601
Conroe, 4,624—Montgomery							
Montgomery County Hosp.	Gen	County	30	40	10	377	2,155
Corpus Christi, 57,301—Nueces							
Carline Clinic-Hospital	Gen	Indiv	10	4	6	92	268
Crippled Children's Hosp.	Orth	NPAssn	27	...	2	Estab. 1947	
Memorial Hospital	Gen	CyCo	127	114	24	1,895	3,470
Spohn Hospital△	Gen	Church	92	73	35	1,028	5,378
U. S. Naval Air Station Dispensary	Gen	Navy	20	6	..	...	2,233
U. S. Naval Hospital△◇	Gen	Navy	488	215	23	539	4,794
Corsicana, 15,232—Navarro							
Corsicana Hospital	Gen	NPAssn	20	6	3	92	448
Navarro Clinic Hospital	Gen	Part	20	13	8	219	1,172
Physicians and Surgeons Hosp.	Gen	County	55	37	18	369	1,520
Crockett, 4,536—Houston							
Butler Memorial Hospital	Gen	Indiv	40	7	7	36	240
Jim Smith Memorial Hospital	Gen	Part	22	9	3	162	849
Stokes-Dean Hospital and Clinic	Gen	Part	16	10	5	157	804
Crosbyton, 1,615—Crosby							
Crosbyton Clinic-Hospital	Gen	NPAssn	34	...	6	Estab. 1947	
Crowell, 1,817—Foard							
Foard County Hospital	Gen	County	13	No data supplied			
Crystal City, 6,529—Zavala							
Crystal Clinic and Hospital	Gen	Indiv	26	9	7	162	926
Cuero, 5,474—Dewitt							
Burns Hospital	Gen	Church	35	18	6	116	1,320
Cuero Hospital and Clinic	Gen	Indiv	25	13	6	165	1,089
Dalhart, 4,892—Dallam							
Loretto Hospital	Gen	Church	40	20	12	372	1,636
Dallas, 294,734—Dallas							
Baylor University Hosp.△◇	Gen	Church	420	373	80	5,567	16,450
Beverly Hills Sanitarium◇	N&M	Corp	102	92	..	...	851
Bradford Memorial Hospital for Babies	Unit of Children's Medical Center						
Carman Sanatorium	TB	Corp	25	24	..	...	44
Children's Hospital	Unit of Children's Medical Center						
Children's Medical Center△◇	Chil	NPAssn	156	29	5	...	3,102
Dallas Medical and Surgical Clinic Hospital△	Gen	Part	23	21	..	...	1,956
East Dallas Hosp. and Clinic	Gen	Corp	38	27	7	107	1,150
Gaston Hospital△	Gen	NPAssn	55	52	..	...	2,200
Maxfield X-Ray and Radium Clinic Hospital	Cancer	Part	16	4	..	...	139
Medical Arts Hospital△◇	Gen	Corp	110	101	..	...	5,110
Methodist Hospital△◇	Gen	Church	308	184	42	2,322	10,202
Nightingale Lying-in Hosp.	Unit of Baylor University Hospital						
Parkland Hospital△◇	Gen	CyCo	370	330	52	1,732	6,607
Pinkston Clinic-Hospital	Gen	Indiv	18	10	5	72	644
St. Paul's Hospital△◇	Gen	Church	310	260	40	3,868	12,657
Texas Scottish Rite Hospital for Crippled Children◇	Orth	NPAssn	75	57	..	...	600
Timberlawn Sanitarium◇	N&M	Corp	60	48	..	...	402
U. S. Naval Air Station Dispensary	Gen	Navy	32	9	..	...	439
Veterans Admin. Hospital△◇	Gen	Vet	366	327	..	...	3,185
Woodlawn Hospital◇	TB	CyCo	100	86	..	...	150
Dayton, 1,279—Liberty							
Dayton Memorial Hospital	Gen	Part	24	...	7	Estab. 1947	
Decatur, 2,578—Wise							
Decatur Clinic Hospital	Gen	Indiv	24	14	7	202	741
Rogers Hospital	Gen	Indiv	25	16	8	159	1,242
Del Rio, 11,695—Val Verde							
Medical and Surgical Clinic and Hospital	Gen	Indiv	18	13	3	122	629
Nightingale Memorial Hosp.	Gen	Indiv	20	...	6	Estab. 1948	
Denison, 15,561—Grayson							
Madonna Hospital	Gen	Church	50	43	12	495	2,676
Missouri, Kansas, Texas Railroad Employees' Hospital	Indus	NPAssn	60	22	..	...	708
Denton, 11,195—Denton							
Denton Hospital and Clinic	Gen	Indiv	35	27	8	388	2,041
Deport, 823—Lamar							
Stephen H. Grant Hospital	Gen	Corp	11	1	4	145	412
Eagle Lake, 2,124—Colorado							
Laughlin Hospital	Gen	Indiv	12	5	4	75	500
Eagle Pass, 6,459—Maverick							
Maverick County Memorial Hospital	Gen	County	29	12	10	17	98
East Bernard, 695—Wharton							
Albert Schuhmann Hospital	Gen	Indiv	10	5	4	111	429
Edinburg, 8,718—Hidalgo							
Grandview Hospital	Gen	CyCo	51	32	12	374	1,574
El Campo, 5,566—Wharton							
Nightingale Hospital	Gen	County	65	36	14	300	1,756
Electra, 5,508—Wichita							
Electra Hospital	Gen	Indiv	20	7	7	125	534
Elgin, 2,626—Bastrop							
Fleming Hospital	Gen	Corp	16	4	6	39	487
El Paso, 96,810—El Paso							
El Paso City-County Hosp.△◇	Gen	CyCo	192	102	19	262	2,438
Hotel Dieu Sisters' Hosp.△◇	Gen	Church	156	119	51	1,235	5,264
Newark Conference Maternity Hospital	Mat	Church	17	11	16	468	570
Providence Memorial Hosp.△	Gen	NPAssn	69	31	..	...	1,586
St. Joseph Maternity Hosp.◇	Unit of Hotel Dieu Sisters' Hospital						
St. Joseph's Sanatorium	TB	Church	75	47	..	...	248
Southwestern General Hosp.△	Gen	Corp	150	105	45	1,154	5,481
William Beaumont General Hospital△	Gen	Army	1,501	1,115	25	557	9,370

Key to symbols and abbreviations is on page 1396

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TEXAS—Continued

Hospitals and Sanatoriums	Type of Service	Ownership or Control	Beds	Average Census †	Bassinets	Number of Births	Admissions †
Ennis, 7,087—Ellis							
Ennis Municipal Hospital	Gen	City	24	14	8	306	1,118
Fabens, 1,025—El Paso							
Fabens Hospital	Gen	Indiv	20	9	6	97	...
Floresville, 1,726—Wilson							
Blake Hospital	Gen	Indiv	12	9	6	361	787
Floydada, 2,726—Floyd							
Floydada Hospital	Gen	Indiv	8	2	3	67	308
Pitts Hospital and Clinic	Gen	Indiv	10	7	4	83	684
Fort Worth, 177,662—Tarrant							
All Saints Hospital♦♣	Gen	Church	110	97	25	1,262	5,435
City-County Hospital♣♣○	Gen	CyCo	168	123	24	674	5,641
W. I. Cook Memorial Hosp.▲	Gen	NPAssn	35	37	8	4	1,442
Ethel Ransom Memorial Hosp.	Gen	Part	30	No data supplied			
Fort Worth Children's Hosp.	Chil	NPAssn	37	17	..	....	299
Harris Memorial Methodist Hospital♦♣○	Gen	Church	297	261	78	3,455	12,737
Pennsylvania Avenue Hosp.	Gen	Part	68	52	10	444	3,402
St. Joseph's Hospital♣○	Gen	Church	259	173	48	2,058	9,444
Station Hospital♣	Gen	Army	100	36	16	115	2,205
U. S. Public Health Service Hospital♦♣	MentDrug	USPHS	1,050	722	..	....	1,788
Fredericksburg, 3,344—Gillespie							
Fredericksburg Hospital and Clinic	Gen	Corp	22	9	8	289	915
Keidel Memorial Hospital	Gen	Part	16	9	5	143	528
Freeport, 2,579—Brazoria							
Dow Hospital	Gen	NPAssn	52	35	12	351	2,706
Freer, 2,346—Duval							
Thomas-Spann Hospital	Gen	Part	12	8	5	113	460
Friona, 903—Parmer							
Parmer County Community Hospital	Gen	NPAssn	24	....	7	Estab. 1947	
Gainesville, 9,651—Cooke							
Gainesville Sanitarium	Gen	Corp	42	21	10	200	1,500
Medical and Surgical Hosp.	Gen	Indiv	46	21	10	243	1,097
Galena Park, 1,502—Harris							
Deaton Hospital	Gen	Indiv	12	6	6	130	569
Galveston, 60,862—Galveston							
Galveston State Psychopathic Hosp. (University of Texas Medical Branch)♦♣	Ment	State	130	120	..	....	1,264
Hospital for Crippled and Deformed Children	Unit of University of Texas Medical Branch						
John Sealy Hospital (University of Texas Medical Branch)♦♣○	Gen	State	496	436	30	984	9,110
Negro Hospital	Unit of University of Texas Medical Branch						
St. Mary's Infirmary♦♣○	Gen	Church	150	138	33	1,130	4,800
U. S. Marine Hospital♦♣	Gen	USPHS	202	170	..	....	5,534
Gatesville, 3,177—Coryell							
Coryell Memorial Hospital	Gen	County	34	12	8	260	1,382
Georgetown, 3,662—Williamson							
Georgetown Hosp. and Clinic	Gen	NPAssn	25	21	8	51	258
Gilmer, 3,138—Upshur							
Oak Lawn Sanitarium	Gen	Part	15	8	4	144	1,825
Ragland Clinic-Hospital	Gen	Part	30	13	10	389	1,691
Gladewater, 4,454—Gregg							
Hancock Clinic and Hospital	Gen	Indiv	25	22	6	155	1,276
Leake-Van Deber Clinic Hosp.	Gen	Part	20	16	5	105	1,043
McKean Clinic Hospital	Gen	Indiv	36	21	8	56	1,130
Gonzales, 4,722—Gonzales							
Holmes Hospital	Gen	Indiv	20	5	4	47	229
Goose Creek, 6,926—Harris							
Goose Creek Hospital	Gen	Corp	40	28	10	570	2,205
Lillie and Duke Hospital	Gen	Part	24	17	8	265	1,291
Gorman, 1,157—Eastland							
Blackwell Hospital	Gen	Part	40	7	5	456	2,643
Graham, 5,175—Young							
Graham Hospital	Gen	NPAssn	25	13	7	286	1,011
Grand Saline, 1,641—Van Zandt							
Cozby-Germany Hospital	Gen	Indiv	13	6	4	122	770
Greenville, 12,965—Hunt							
Goode Clinic and Hospital	Gen	Indiv	12	4	8	73	512
Dr. Joe Recton's Hospital	Gen	Indiv	40	31	8	257	1,443
Philips Clinic and Hospital	Gen	Indiv	35	12	12	328	1,706
Groesbeck, 2,272—Limestone							
Dr. Orr's Hospital	Gen	Indiv	7	4	5	35	212
Hallettsville, 1,581—Lavaca							
Renger Hospital	Gen	Indiv	22	14	6	155	706
Hamlin, 2,406—Jones							
Hamlin Memorial Hospital	Gen	NPAssn	18	....	4	Estab. 1948	
Harlingen, 15,306—Cameron							
Valley Baptist Hospital♣	Gen	Church	82	72	29	715	3,400
Haskell, 3,661—Haskell							
Haskell County Hospital	Gen	County	25	7	6	300	2,251
Henderson, 6,417—Rusk							
Henderson Memorial Hospital	Gen	NPAssn	50	28	13	460	2,445
Hereford, 2,584—Deaf Smith							
Deaf Smith County Hospital	Gen	County	20	15	6	216	1,279
Hillsboro, 7,706—Hill							
Boyd Sanitarium	Gen	Indiv	23	15	8	285	947
Houston, 384,514—Harris							
M. D. Anderson Hospital for Cancer Research	Cancer	State	62	28	..	....	367
Autry Memorial Hosp.-School	Unit of Houston Tuberculosis Hospital						
Dr. Greenwood's Sanitarium	N & M	Corp	40	30	..	....	53
Heights Hospital	Gen	Corp	76	55	20	835	3,730
Hermann Hospital♦♣○	Gen	NPAssn	300	223	30	1,366	9,580
Houston Eye, Ear and Throat Hospital	EST	NPAssn	22	13	..	....	1,939
Houston Negro Hospital	Gen	NPAssn	65	37	20	649	2,661
Houston Tuberculosis Hosp.	TB	CyCo	367	179	..	....	291

TEXAS—Continued

Hospitals and Sanatoriums	Type of Service	Ownership or Control	Beds	Average Census †	Bassinets	Number of Births	Admissions †
Jefferson Davis Hospital♦♣○	Gen	CyCo	441	347	52	1,803	11,240
Keightley Hospital	N & M	Indiv	40	19	..	....	130
Memorial Hospital♦♣○	Gen	Church	284	255	35	2,533	11,402
Methodist Hospital♦♣○	Gen	Church	135	133	22	992	5,988
Montrose Hospital	N & M	Part	40	20	..	....	615
North Houston Hospital	Gen	Part	20	....	9	Estab. 1947	
Park View Hospital	Gen	Corp	30	18	5	128	1,552
St. Joseph's Infirmary♦♣○	Gen	Church	377	374	95	5,927	19,272
Southern Pacific Hospital♦♣	Indus	NPAssn	130	94	..	....	2,851
Turner Urological Institute	Urol	Indiv	18	15	..	....	700
U. S. Naval Hospital♦	Gen	Navy	520	299	..	....	3,200
Wright Clinic and Hospital▲	Gen	Indiv	31	22	6	143	1,161
Jacksboro, 2,388—Jack							
Jacksboro Hospital	Gen	Part	13	7	4	139	661
Jacksonville, 7,213—Cherokee							
San Travis Memorial Hosp.▲	Gen	NPAssn	116	70	20	617	4,051
Jasper, 5,497—Jasper							
Richardson Hospital	Gen	Indiv	20	15	9	216	600
Kaufman, 2,634—Kaufman							
Hall-de Blaming Hospital	Gen	Part	13	5	6	125	600
Kenedy, 2,991—Karnes							
Kenedy Clinic and Hospital	Gen	Indiv	20	12	4	162	751
Kermit, 2,584—Winkler							
Robinson-McClure Clinic-Hospital	Gen	Part	18	13	5	190	1,920
Winkler County Memorial Hospital	Gen	County	40	....	9	Estab. 1947	
Kerrville, 5,572—Kerr							
Kerrville General Hospital	Gen	NPAssn	20	12	6	246	960
Kerrville State Sanatorium	TB	State	173	147	..	....	226
Sunnyside Sanatorium	TB	Indiv	20	16	..	....	30
Kilgore, 6,708—Gregg							
Kilgore Memorial Hospital	Gen	NPAssn	21	21	7	443	1,556
Kingsville, 7,782—Kleberg							
Kleberg County Hospital	Gen	County	44	30	11	460	2,230
Knox City, 1,127—Knox							
Knox County Hospital	Gen	County	26	22	8	336	1,755
La Grange, 7,531—Fayette							
La Grange Hospital	Gen	Corp	45	36	9	212	1,211
Lamesa, 6,008—Dawson							
Lamesa General Hospital	Gen	Part	32	19	9	327	1,624
Price Clinic and Hospital	Gen	Indiv	19	4	6	165	901
Lampasas, 3,426—Lampasas							
Rollins-Brook Hospital	Gen	Part	24	16	6	248	1,507
Laredo, 39,274—Webb							
Laredo-Webb County Tuberculosis Hospital	TB	State	30	25	..	....	32
Mercy Hospital	Gen	Church	80	47	28	1,050	3,802
La Tuna, 200—El Paso							
Federal Correctional Institution	Inst	USPHS	23	15	..	....	416
Legion, 200—Kerr							
Veterans Admin. Hospital♦♣	TB	Vet	400	343	..	....	900
Levelland, 3,061—Hockley							
Phillips-Dupre Hospital	Gen	Part	26	12	6	380	1,386
Liberty, 3,087—Liberty							
Mercy Hospital	Gen	Church	55	24	12	320	1,114
Yettie Kerstine Memorial Hospital	Gen	County	20	14	2	150	964
Littlefield, 5,617—Lamb							
Littlefield Hospital and Clinic	Gen	Part	20	9	6	250	1,000
Payne-Shotwell Hospital and Clinic	Gen	Part	40	18	10	180	1,512
Lockhart, 5,076—Caldwell							
Lockhart Sanitarium	Gen	City	20	9	6	79	450
Longview, 15,729—Gregg							
Gregg Memorial Hospital	Gen	County	40	29	8	345	1,900
Hurst Eye, Ear, Nose and Throat Hospital	ENT	NPAssn	25	4	..	....	950
Markham Hospital	Gen	NPAssn	32	17	10	466	1,401
Lubbock, 31,853—Lubbock							
Chatman Hospital-Clinic	Gen	Indiv	16	4	8	89	1,400
Lubbock Memorial Hosp.♣○	Gen	NPAssn	102	82	17	620	5,055
St. Mary of the Plains Hosp.	Gen	Church	80	38	12	364	2,353
West Texas Hospital♦○	Gen	Corp	72	70	24	1,073	5,494
Lufkin, 9,567—Angelina							
Angelina County Hospital	Gen	County	66	47	14	934	2,648
Luling, 4,457—Caldwell							
Luling Hospital	Gen	Part	20	14	8	153	820
Marlin, 6,542—Falls							
Bule-Allen Hospital	Gen	Indiv	36	32	5	82	900
Bule Clinic and Marlin Sanitarium Bath House and Hilton Hotel	Unit of Bule-Allen Hospital						
Torbett Clinic and Hospital	Gen	Corp	73	42	10	196	2,220
Marshall, 18,410—Harrison							
Kahn Memorial Hospital	Gen	NPAssn	42	11	8	556	1,841
Texas and Pacific Railway Employees Hospital	Indus	NPAssn	105	73	..	....	2,571
Matador, 1,376—Motley							
Trawick Hospital	Gen	Indiv	14	8	4	69	330
Mathis, 1,950—San Patricio							
Mathis Hospital	Gen	Indiv	16	8	4	111	521
McAllen, 11,877—Hidalgo							
McAllen Municipal Hospital	Gen	City	65	44	19	631	2,365
McKinney, 8,555—Collin							
McKinney City Hospital♣	Gen	City	73	48	22	670	2,285
Veterans Admin. Hospital♦♣	Gen	Vet	670	600	..	....	4,984
Memphis, 3,809—Hall							
Goodall Hospital	Gen	Indiv	18	9	6	155	871

Key to symbols and abbreviations is on page 1386

TEXAS—Continued

Hospitals and Sanatoriums	Type of Service	Ownership or Control	Beds	Average Census †	Bassinets	Number of Births	Admissions †
Mercedes, 7,624—Hidalgo							
Mercedes General Hospital	Gen	NPAssn	19	12	9	200	1,000
Meridian, 1,016—Bosque							
Holt Hospital and Clinic	Gen	Indiv	22	8	4	151	669
Merkel, 2,865—Taylor							
Sadler Clinic-Hospital	Gen	Indiv	19	7	6	124	574
Mexia, 6,410—Limestone							
Brown Hospital	Gen	Indiv	20	12	5	121	837
Midland, 9,352—Midland							
Western Clinic-Hospital	Gen	Part	32	20	10	459	1,684
Mineola, 5,225—Wood							
Mineola Hospital-Clinic	Gen	Indiv	15	4	4	126	521
Mineral Wells, 6,305—Palo Pinto							
Nazareth Hospital♣	Gen	Church	40	18	10	221	1,164
Monahans, 3,944—Ward							
Bell Clinic-Hospital	Gen	Indiv	12	...	4	Estab. 1947	
Turney Hospital	Gen	Indiv	25	14	8	318	1,078
Mount Pleasant, 4,525—Titus							
Taylor Hospital and Clinic	Gen	Part	32	4	3	67	400
Mount Vernon, 1,461—Franklin							
Franklin County Hospital	Gen	County	15	...	4	Estab. 1947	
Nacogdoches, 7,558—Nacogdoches							
City Memorial Hospital	Gen	City	60	42	13	599	3,284
Navasota, 6,338—Grimes							
Brazos Valley Sanitarium	Gen	NPAssn	25	14	8	308	1,451
New Braunfels, 6,976—Comal							
Comal Sanitarium	Gen	Part	35	6	2	32	...
New Braunfels Hospital	Gen	City	30	18	5	249	933
New Gulf,—Wharton							
Texas Gulf Sulphur Company Hospital	Gen	NPAssn	20	8	4	82	491
Nocona, 2,685—Montague							
Major Clinic Hospital	Gen	Part	13	9	5	100	611
Odessa, 9,573—Ector							
Bradlee Hospital	Gen	Indiv	23	11	10	313	1,410
Wood Hospital	Gen	Part	30	15	10	210	1,823
Olney, 3,497—Young							
Hamilton Hospital	Gen	City	30	4	7	275	1,587
Orange, 7,473—Orange							
Frances Ann Lutcher Hosp.	Gen	Corp	45	35	12	524	1,737
Orange City Hospital	Gen	City	85	26	21	464	2,251
Overton, 2,315—Rusk							
Rocky Mount Hospital	Ven	State	175	137	..	...	5,473
Paducah, 2,677—Cottle							
W. Q. Richards Memorial Hospital	Gen	Indiv	20	10	4	172	727
Palestine, 12,144—Anderson							
Missouri Pacific Lines Employees' Hospital	Indus	NPAssn	75	52	..	...	1,400
Palestine Sanitarium	Gen	Corp	30	20	9	438	1,446
Pampa, 12,982—Gray							
Worley Hospital	Gen	Indiv	44	28	11	480	3,178
Paris, 18,678—Lamar							
Geo. Griffiths Memorial Hospital for Children	Unit of Sanitarium of Paris						
Lamar County Hospital	Gen	County	50	18	7	82	881
St. Joseph's Hospital♣	Gen	Church	60	60	15	577	2,437
Sanitarium of Paris♣	Gen	Corp	81	79	12	273	2,554
Pasadena, 3,496—Harris							
Pasadena Hospital and Clinic	Gen	Part	48	26	14	606	2,649
Pearsall, 3,164—Frio							
Goodnight Clinic Hospital	Gen	Indiv	17	10	2	99	625
Pecos, 4,655—Reeves							
Camp and Camp Hospital	Gen	Indiv	17	7	8	149	512
Perryton, 2,925—Ochiltree							
Perryton Hospital	Gen	Indiv	15	12	6	153	744
Sanford Hospital and Clinic	Gen	Corp	40	...	12	Estab. 1947	
Phillips, 4,000—Hutchinson							
Phillips-Pantex Hospital	Gen	NPAssn	21	10	8	106	736
Pittsburg, 2,916—Camp							
Pittsburg Medical and Surgical Hospital	Gen	NPAssn	26	15	10	308	1,982
Plainview, 8,263—Hale							
Plainview Sanitarium and Clinic	Gen	Part	161	85	12	557	3,097
Port Arthur, 46,140—Jefferson							
St. Mary's Hospital, Gates Memorial♣◇	Gen	Church	154	100	35	1,830	6,818
Poteet, 2,315—Atascosa							
Shotts Memorial Hospital	Gen	Indiv	12	5	4	62	554
Prairie View (Hempstead P. O.), 140—Waller							
Prairie View University Hospital◇	Gen	State	54	28	4	31	840
Quanah, 3,767—Hardeman							
Memorial Hospital	Gen	County	56	31	9	329	1,945
Randolph Field,—Bexar							
Station Hospital♣	Gen	Army	100	48	..	...	2,027
Ranger, 4,553—Eastland							
Ranger General Hospital	Gen	CyCo	35	20	8	135	1,000
West Texas Hospital	Gen	Corp	18	14	3	58	500
Raymondville, 4,050—Willacy							
Raymondville Hospital	Gen	Part	21	11	6	246	800
Refugio, 4,077—Refugio							
Refugio County Hospital	Gen	Church	33	15	8	202	1,066
Robstown, 6,788—Nueces							
Robstown Hospital	Gen	NPAssn	17	6	7	222	1,287
Roscoe, 1,106—Nolan							
Young Hospital	Gen	Part	25	15	7	159	1,260
Rosenberg, 3,457—Fort Bend							
Fort Bend Hospital	Gen	Part	23	12	6	142	1,576
Rotan, 2,029—Fisher							
Callan Hospital	Gen	Part	51	27	10	293	1,959

TEXAS—Continued

Hospitals and Sanatoriums	Type of Service	Ownership or Control	Beds	Average Census †	Bassinets	Number of Births	Admissions †
Rusk, 5,699—Cherokee							
Rusk State Hospital♣	Ment	State	2,414	2,414	..	...	581
San Angelo, 25,869—Tom Green							
Clinic-Hospital♣	Gen	Corp	55	36	15	525	2,497
St. John's Hospital♣	Gen	Church	40	29	12	726	1,853
Shannon West Texas Memorial Hospital♣◇	Gen	NPAssn	139	118	20	668	5,896
Station Hospital	Gen	Army	75	...	..	...	...
San Antonio, 253,854—Bexar							
Baptist Memorial Hosp.♣♣◇	Gen	Church	252	199	45	2,000	11,960
Brooke General Hospital♣◇♣	Gen	Army	2,346	2,303	52	1,197	20,840
Central Clinic Hospital	Gen	Indiv	10	5	4	75	230
Grace Lutheran Sanatorium	TB	Church	40	37	..	...	146
Medical Arts Hospital	Gen	Corp	29	21	5	35	1,700
Mission Medical Center	Ven	State	200	139	..	...	5,854
Dr. Moody's Sanitarium	N & M	Corp	50	31	..	...	113
Nix Memorial Hospital♣◇	Gen	Corp	149	124	30	1,475	6,508
Robert B. Green Memorial Hospital♣◇	Gen	County	190	158	26	1,650	4,000
Saenz Clinic and Hospital	Gen	Indiv	12	7	6	214	554
San Antonio State Hospital	Ment	State	2,737	2,729	..	...	812
Santa Rosa Hospital♣◇♣◇	Gen	Church	357	322	56	3,441	14,565
Station Hospital♣	Gen	Army	1,000	468	20	502	12,431
Woodmen of the World Memorial Hospital♣◇♣	TB	NPAssn	150	85	..	...	134
Sanatorium, 1,475—Tom Green							
State Tuberculosis Sanat.♣	TB	State	955	617	..	...	1,243
San Marcos, 6,006—Hays							
Memorial Hospital	Gen	NPAssn	44	13	11	190	1,023
Santa Anna, 1,661—Coleman							
Sealy Hospital	Gen	Part	15	7	3	91	492
Seagraves, 2,225—Gaines							
Seagraves Clinic-Hospital	Gen	Part	12	5	4	53	416
Sealy, 2,560—Austin							
Sealy Hospital	Gen	Indiv	10	5	4	80	580
Seguin, 7,006—Guadalupe							
Seguin Hospital	Gen	Part	21	17	12	358	948
Seminole, 1,761—Gaines							
Andrew S. Tomb Clinic-Hosp.	Gen	Indiv	20	15	6	175	...
Gaines Clinic and Hospital	Gen	Part	16	9	6	132	512
Seymour, 3,528—Baylor							
Baylor County Hospital	Gen	County	29	17	7	180	1,018
Sherman, 17,156—Grayson							
St. Vincent's Hospital♣	Gen	Church	76	61	18	471	3,074
Wilson N. Jones Memorial Hospital♣◇	Gen	NPAssn	72	57	13	366	3,317
Shiner, 1,520—Lavaca							
Dr. Wagner's Hospital	Gen	Indiv	18	12	4	137	519
Sinton, 3,770—San Patricio							
Sinton Hospital	Gen	NPAssn	20	15	8	261	1,470
Slaton, 3,567—Lubbock							
Mercy Hospital	Gen	Church	50	13	10	232	1,300
Snyder, 3,815—Scurry							
Snyder General Hospital	Gen	Corp	25	12	10	175	907
Spearman, 1,766—Hansford							
Hansford Hospital	Gen	NPAssn	16	...	5	Estab. 1947	
Spur, 2,136—Dickens							
Nichols General Hospital	Gen	Indiv	20	15	7	85	625
Stamford, 4,810—Jones							
Stamford Sanitarium	Gen	Part	50	36	15	341	2,383
Stephenville, 4,708—Erath							
Stephenville Hosp. and Clinic	Gen	NPAssn	50	36	10	278	2,194
Sugar Land, 2,400—Fort Bend							
Laura Eldridge Hospital	Gen	NPAssn	30	15	4	193	1,105
Sulphur Springs, 6,742—Hopkins							
Longino Hospital	Gen	Indiv	13	9	5	112	560
Sulphur Springs Clinic Hosp.	Gen	Part	13	6	5	120	500
Sweetwater, 10,267—Nolan							
Sweetwater Municipal Hosp.	Gen	City	45	35	10	462	2,983
Taylor, 7,875—Williamson							
Johns Clinic and Hospital	Gen	Indiv	9	...	2	Estab. 1947	
Stromberg Clinic and Hosp.	Gen	Corp	38	24	8	148	915
Wedemeyer Hospital	Gen	Corp	31	26	7	250	1,720
Temple, 15,344—Bell							
Gulf, Colorado and Santa Fe Hospital♣	Indus	NPAssn	150	58	..	...	3,227
Kings Daughters Hospital♣♣	Gen	NPAssn	110	77	16	439	3,313
Scott and White Hosp.♣♣◇	Gen	Corp	204	170	16	404	6,780
Veterans Admin. Hospital♣	Gen	Vet	1,000	461	..	...	4,139
Terrell, 16,481—Kaufman							
Alexander Hospital	Gen	Indiv	20	12	6	125	1,100
Friddell Hospital	Gen	Indiv	18	10	4	76	433
Holton-Johnston Clinic-Hosp.	Gen	Part	20	13	6	192	640
Lane Clinic-Hospital	Gen	Indiv	10	4	3	29	215
Terrell State Hospital	Ment	State	2,704	2,700	..	...	665
Texarkana, 17,619—Bowie							
Federal Correctional Institution	Inst	USPHS	29	12	..	...	420
Station Hospital	Gen	Army	25	1	..	...	324
Texarkana Hospital♣	Gen	NPAssn	50	47	8	537	2,970
Texas City, 5,748—Galveston							
Danforth Memorial Hospital	Gen	Indiv	30	23	16	219	1,016
Twidwell-Schmidt Hospital	Gen	Part	12	5	6	247	1,874
Tyler, 29,479—Smith							
Bryant Clinic and Hospital	Gen	Part	15	14	8	287	1,356
Mother Frances Hospital♣	Gen	Church	74	55	19	809	3,314
Ulvade, 6,679—Ulvade							
Merritt Hospital	Gen	Indiv	13	No data supplied			
Velasco, 1,000—Brazoria							
Dow Magnesium Corporation Hospital	Gen	NPAssn	52	38	12	358	2 956

Key to symbols and abbreviations is on page 1386

TEXAS—Continued

Hospitals and Sanatoriums	Type of Service	Ownership or Control	Beds	Average Census †	Bassinets	Number of Births	Admissions †
Vernon, 9,277—Wilbarger							
Christ the King Hospital	Gen	Church	29	12	5	177	807
Shipman Clinic Hospital	Gen	Indiv	13	9	4	46	626
Vernon Hospital	Gen	Part	24	16	8	283	1,456
Victoria, 11,566—Victoria							
DeTar Memorial Hospital	Gen	Indiv	38	35	12	288	2,070
Victoria Hospital	Gen	Indiv	26	16	13	245	1,360
Waco, 55,982—McLennan							
Hillcrest Memorial Hosp.◆◇	Gen	Church	148	133	44	1,031	6,439
Providence Hospitals◇	Gen	Church	130	118	25	1,006	7,178
Riverside Hospital	Ven	State	130	131	..	...	4,722
Veterans Admin. Hospital◆◇	Ment	Vet	2,214	2,086	..	...	2,578
Waxahachie, 8,655—Ellis							
Waxahachie Sanitarium◆	Gen	NPAssn	34	12	7	373	1,830
Weatherford, 5,924—Parker							
Medical and Surgical Clinic-Hospital	Gen	Part	16	12	9	274	912
Parker County Hospital	Gen	County	23	9	4	106	511
Wellington, 5,366—Collingsworth							
St. Joseph's Hospital◆	Gen	Church	23	15	6	204	988
Wharton, 4,386—Wharton							
Caney Valley Hospital	Gen	Part	45	12	10	200	1,404
Rugeley and Blasingame Clinic-Hospital	Gen	Corp	30	25	6	158	2,121
Wheeler, 848—Wheeler							
Wheeler Hospital	Gen	Part	24	8	6	152	820
Wichita Falls, 45,112—Wichita							
Bethania Hospital◆	Gen	Church	55	41	16	639	2,425
Wichita Falls Clinic-Hosp.◆◆◆	Gen	Part	102	88	15	477	4,918
Wichita Falls State Hospital	Ment	State	2,479	2,440	..	...	829
Wichita General Hospital◆◇	Gen	CyCo	135	92	18	1,058	5,145
Wills Point, 1,976—Van Zandt							
Baker Clinic-Hospital	Gen	Indiv	10	7	3	128	504
Yoakum, 4,735—Lavaca							
Huth Memorial Hospital	Gen	Church	35	25	5	240	1,220
Related Institutions							
Alpine, 3,866—Brewster							
Lockhart Clinic-Hospital	Gen	Indiv	14	8	6	97	512
Amarillo, 51,868—Potter							
M. L. Wyatt Memorial Hosp.	Gen	Indiv	15	7	5	150	269
Arlington, 4,240—Tarrant							
Knights Templar Hospital	Inst	NPAssn	25	17	..	...	172
Woodward Hospital	ENT	Indiv	10	2	..	...	1,400
Austin, 87,930—Travis							
Austin State School	MeDe	State	2,001	1,987	..	...	274
Beaumont, 59,061—Jefferson							
Beaumont Infirmary	Mat	Indiv	17	11	20	632	635
Bronte, 754—Coke							
Karen-Gayl Hospital	Gen	Indiv	8	...	3	Estab. 1947	
Cooper, 2,557—Delta							
Janes Hospital	Gen	Indiv	10	6	6	116	316
Corpus Christi, 57,301—Nueces							
Sisez Hospital	Gen	Indiv	23	15	..	...	822
Dallas, 294,734—Dallas							
Love-Youngblood Eye and Ear Hospital	ENT	Part	6	4	..	...	129
Eastland, 3,849—Eastland							
Eastland Hospital	Gen	Indiv	12	4	4	105	345
El Paso, 96,810—El Paso							
Mesa Sanatorium	TB	Indiv	21	19	..	...	53
Fort Worth, 177,662—Tarrant							
Elmwood Sanatorium	TB	CyCo	76	65	..	...	84
Harrison Clinic and Hospital	Gen	Indiv	40	26	6	106	1,376
Howard Sanitarium	N&M	Indiv	17	9	..	...	80
West Texas Maternity Hosp.	Mat	NPAssn	30	31	10	90	116
Galveston, 60,862—Galveston							
Stewart Convalescent Home	Conv	State	30	10	..	...	11
Hallettsville, 1,581—Lavaca							
Dufner Hospital	Gen	Indiv	8	5	3	27	135
Hico, 1,241—Hamilton							
Hico Hospital and Clinic	Gen	Corp	10	...	2	Estab. 1947	
Houston, 384,514—Harris							
Hedgecroft Clinic-Hospital	Orth	Indiv	15	15	..	...	96
Physicians and Surgeons Hospital	Gen	Part	30	13	..	...	1,222
Huntsville, 5,158—Walker							
Texas State Prison Hospital	Inst	State	158	105	..	...	1,050
Hutchins, 600—Dallas							
City-County Convalescent Hospital	Conv	CyCo	135	122	..	...	97
Kaufman, 2,654—Kaufman							
Shaw Clinic and Hospital	Gen	Indiv	6	...	3	Estab. 1948	
Longview, 18,728—Gregg							
Camp Normal Industrial Hospital	Gen	Indiv	10	3	4	48	274
Loraine, 700—Mitchell							
Johnson Hospital	Gen	Part	10	7	4	120	380
Marlin, 6,543—Falls							
Hunter Clinic Hospital	Gen	Indiv	18	3	2	15	140
Matador, 1,376—Motley							
Stanley Clinic Hospital	Gen	Indiv	10	6	6	151	534
McCamey, 2,566—Upton							
Cooper Hospital	Gen	Indiv	11	7	4	150	300
Memphis, 5,066—Hall							
Clark Hospital	Gen	Indiv	8	7	6	145	637
Moulton, 643—Lavaca							
H. J. Strieder Hospital	Gen	Indiv	9	6	3	64	169
New Boston, 1,111—Bowie							
McGee Hospital	Gen	Indiv	12	6	6	147	808
Rosebud, 1,342—Falls							
Rosebud Hospital and Clinic	Gen	Indiv	31	10	3	139	550

TEXAS—Continued

Related Institutions	Type of Service	Ownership or Control	Beds	Average Census †	Bassinets	Number of Births	Admissions †
San Antonio, 253,854—Bexar							
Salvation Army Home and Hospital	Mat	Church	35	20	12	68	73
Smithville, 3,100—Bastrop							
Hoch Clinic-Hospital	Gen	Indiv	19	...e	5	...	...
Sulphur Springs, 6,742—Hopkins							
Worsham Hospital	Gen	Indiv	13	6	6	185	413
Teague, 3,157—Freestone							
City Hospital	Gen	Indiv	16	7	6	175	592
Texon, 1,200—Reagan							
Big Lake Oil Company Hosp.	Gen	NPAssn	9	1	6	20	80
Tulia, 2,655—Swisher							
Swisher County Hospital	Gen	County	12	11	6	170	1,054
Waco, 55,982—McLennan							
Waco State Home Hospital	Inst	State	30	6	..	...	600

UTAH

Hospitals and Sanatoriums	Type of Service	Ownership or Control	Beds	Average Census †	Bassinets	Number of Births	Admissions †
American Fork, 3,323—Utah							
American Fork Community Hospital	Gen	City	22	4	12	286	797
Bingham Canyon, 2,834—Salt Lake							
Bingham Canyon Hospital◆	Gen	Indiv	40	27	8	73	942
Brigham, 5,641—Box Elder							
Cooley Memorial Hospital	Gen	Indiv	35	22	20	431	1,097
Cedar City, 4,695—Iron							
Iron County Hospital	Gen	County	45	24	16	412	1,522
Coalville, 949—Summit							
Summit County Hospital	Gen	County	17	9	8	198	533
Fort Duchesne, 104—Uintah							
Uintah and Ouray Agency Indian Hospital	Gen	IA	30	12	6	50	349
Heber, 2,748—Wasatch							
Heber Hospital	Gen	Part	14	9	10	179	389
Lehi, 2,733—Utah							
Lehi City Hospital	Gen	City	15	7	8	114	354
Logan, 11,868—Cache							
Cache Valley General Hosp.	Gen	NPAssn	43	27	18	583	1,780
William Budge Memorial Hospital◆	Gen	NPAssn	67	38	21	621	5,507
Moab, 1,084—Grand							
Grand County Public Hosp.	Gen	County	19	6	6	90	423
Ogden, 43,688—Weber							
St. Benedict's Hospital◆◆◇	Gen	Church	154	117	60	1,372	5,339
Thomas D. Dee Memorial Hospital◆◆◇	Gen	Church	220	175	69	2,207	11,011
Utah State Tuberculosis Sanatorium◆	TB	State	90	65	..	...	115
Park City, 3,739—Summit							
Park City Miners' Hospital	Gen	NPAssn	17	9	6	68	500
Payson, 3,591—Utah							
Payson City Hospital	Gen	NPAssn	34	27	10	635	1,469
Price, 5,214—Carbon							
Price City Hospital	Gen	City	51	33	12	649	1,507
Provo, 18,071—Utah							
Utah State Hospital	Ment	State	1,900	1,149	..	...	472
Utah Valley Hospital◆	Gen	NPAssn	62	70	29	1,301	3,958
Richfield, 3,344—Sevier							
Sevier Valley Hospital	Gen	Indiv	27	17	12	328	1,121
St. George, 3,591—Washington							
D. A. McGregor Hospital	Gen	NPAssn	24	10	8	241	610
Salina, 1,619—Sevier							
Salina Hospital	Gen	City	10	9	10	128	557
Salt Lake City, 149,934—Salt Lake							
Dr. W. H. Groves Latter-Day Saints Hospital◆◆◇	Gen	Church	302	234	110	4,084	14,854
Holy Cross Hospital◆◆◇	Gen	Church	200	162	69	2,532	7,253
Primary Children's Hospital	Chil	Church	33	27	..	...	104
St. Mark's Hospital◆◆◇	Gen	Church	214	189	99	951	6,486
Salt Lake General Hosp.◆◆◇	Gen	County	332	167	82	312	3,551
Shriners Hospital for Crippled Children	Orth	NPAssn	30	29	..	...	32
Veterans Admin. Hospital◆◇	Gen	Vet	204	167	..	...	2,816
Spanish Fork, 4,167—Utah							
Hughes Memorial Hospital	Gen	Indiv	12	6	7	212	434
Tremonton, 1,445—Box Elder							
Valley Hospital	Gen	NPAssn	30	14	15	190	1,194
Related Institutions							
American Fork, 3,323—Utah							
Utah State Training School	MeDe	State	650	650	..	...	65
Murray, 5,740—Salt Lake							
Cottonwood Stake Maternity Hospital	Mat	Church	25	19	20	980	1,000

VERMONT

Hospitals and Sanatoriums	Type of Service	Ownership or Control	Beds	Average Census †	Bassinets	Number of Births	Admissions †
Barre, 10,909—Washington							
Barre City Hospital◆◇	Gen	NPAssn	64	45	17	888	3,975
Washington County Sanat.	TB	State	67	34	..	...	52
Bellows Falls, 4,236—Windham							
Rockingham Hospital	Gen	NPAssn	40	29	12	223	1,022
Bennington, 7,822—Bennington							
Henry W. Putnam Memorial Hospital◆	Gen	NPAssn	66	72	20	334	2,449

VERMONT—Continued

Hospitals and Sanatoriums	Type of Service	Ownership or Control	Beds	Average Census †	Bassinets	Number of Births	Admissions †
Brattleboro, 9,622—Windham							
Brattleboro Memorial Hosp.▲	Gen	NPAssn	75	51	20	359	1,837
Brattleboro Retreat	Ment	NPAssn	750	693	..	....	218
Burlington, 27,696—Chittenden							
Bishop DeGoesbriand Hospital◆◆▲◇	Gen	Church	115	113	25	687	3,711
Mary Fletcher Hospital◆◆▲◇	Gen	NPAssn	193	182	37	993	5,993
Hardwick, 1,467—Caledonia							
Hardwick Hospital	Gen	NPAssn	17	10	6	135	297
Jeffersonville, 287—Lamoille							
Roger W. Mann Hospital	Gen	Indiv	15	7	6	90	205
Middlebury, 2,125—Addison							
Porter Hospital▲	Gen	NPAssn	45	27	10	316	1,767
Montpelier, 8,606—Washington							
Heaton Hospital▲◇	Gen	NPAssn	73	65	20	375	3,650
Morrisville, 1,167—Lamoille							
Copley Hospital	Gen	NPAssn	31	22	5	100	850
Newport, 4,902—Orleans							
Broadview General Hospital	Gen	Indiv	26	....	10	Estab. 1947	
Orleans County Memorial Hospital▲	Gen	NPAssn	40	32	10	356	1,376
Pittsford, 576—Rutland							
Vermont Sanatorium	TB	State	65	62	..	....	124
Proctor, 2,184—Rutland							
Proctor Hospital	Gen	NPAssn	35	20	7	111	756
Randolph, 1,988—Orange							
Gifford Memorial Hospital▲◇	Gen	NPAssn	53	40	11	255	1,597
Rutland, 17,082—Rutland							
Rutland Hospital▲◇	Gen	NPAssn	167	130	38	846	4,787
St. Albans, 8,651—Franklin							
St. Albans Hospital▲◇	Gen	NPAssn	61	48	20	518	2,400
St. Johnsbury, 7,437—Caledonia							
Brightlook Hospital▲◇	Gen	NPAssn	55	38	12	746	,700
St. Johnsbury Hospital	Gen	Church	30	19	9	102	560
Springfield, 5,185—Windsor							
Springfield Hospital▲	Gen	NPAssn	47	45	16	408	1,568
Waterbury, 3,074—Washington							
Vermont State Hospital◆	Ment	State	1,125	1,104	..	....	408
White River Junction, 2,271—Windsor							
Veterans Admin. Center◆▲	Gen	Vet	250	198	..	....	3,672
Windsor, 3,402—Windsor							
Windsor Hospital	Gen	NPAssn	16	10	8	186	452
Winooski, 6,036—Chittenden							
Fanny Allen Hospital◆◇	Gen	Church	85	85	14	827	3,197
Related Institutions							
Brandon, 2,979—Rutland							
Brandon State School	MeDe	State	383	384	..	....	21
Pittsford, 576—Rutland							
Caverly Preventorium	TB	NPAssn	44	44	..	....	75
Windsor, 3,402—Windsor							
Vermont State Prison Hosp.	Inst	State	12	4	..	....	123

VIRGINIA

Hospitals and Sanatoriums	Type of Service	Ownership or Control	Beds	Average Census †	Bassinets	Number of Births	Admissions †
Abingdon, 3,158—Washington							
Johnston Memorial Hospital◇	Gen	NPAssn	65	66	5	274	2,101
Alexandria, 33,523—Arlington							
Alexandria Hospital◆◆▲◇	Gen	NPAssn	168	135	60	2,930	6,438
Altavista, 2,919—Campbell							
Piedmont General Hospital	Gen	Part	30	10	5	108	545
Arlington, 57,040—Arlington							
Anderson Orthopedic Clinic and Hospital	Orth	Indiv	14	....	..	Estab. 1947	
Arlington Hospital◆◆▲	Gen	NPAssn	115	84	36	1,788	4,563
Bedford, 3,973—Bedford							
John Russell Hospital	Gen	Corp	21	19	10	218	1,014
Bristol, 9,708—Washington							
Fort Shelby Hospital	Gen	Indiv	14	6	6	208	514
Kings Mountain Memorial Hospital▲	Gen	NPAssn	66	62	10	820	3,914
Brook Hill, 100—Henrico							
Pine Camp Hospital	See Richmond, Virginia						
Burkeville, 658—Nottoway							
Piedmont Sanatorium	TB	State	200	200	.	....	118
Camp Lee,—Prince George							
Station Hospital	Gen	Army	1,263	439	16	211	6,604
Catawba Sanatorium, 100—Roanoke							
Catawba Sanatorium◇	TB	State	400	295	..	....	305
Charlottesville, 19,400—Albemarle							
Blue Ridge Sanatorium◆◇	TB	State	370	287	..	....	341
Martha Jefferson Hospital and Sanitarium▲	Gen	NPAssn	54	48	15	500	2,498
University of Virginia Hospital◆◆▲◇	Gen	State	498	429	59	1,721	14,021
Christiansburg, 2,296—Montgomery							
New Altamont Hospital▲	Gen	Corp	25	21	8	597	1,853
Clifton Forge, 6,461—Alleghany							
Chesapeake and Ohio Hospital◆◆▲◇	Gen	NPAssn	155	122	30	380	5,166
Clintwood, 1,106—Dickenson							
Dickenson County Hospital	Gen	Indiv	20	13	8	186	648
Coeburn, 764—Wise							
Coeburn Hospital	Gen	Part	25	18	4	275	1,345
Covington, 6,350—Alleghany							
Alleghany Memorial Hospital	Gen	CyCo	31	16	10	266	900
Danville, 32,749—Pittsylvania							
Hilltop Sanatorium	TB	NPAssn	36	32	..	....	93
Memorial Hospital▲◇	Gen	NPAssn	170	153	36	1,280	5,654

VIRGINIA—Continued

Hospitals and Sanatoriums	Type of Service	Ownership or Control	Beds	Average Census †	Bassinets	Number of Births	Admissions †
Farmville, 3,475—Prince Edward							
Southside Community Hosp.▲	Gen	NPAssn	63	56	12	530	2,283
Fort Belvoir,—Fairfax							
Station Hospital	Gen	Army	839	402	40	148	6,824
Fort Eustis,—Warwick							
Station Hospital	Gen	Army	200	100	7	62	4,004
Fort Monroe, 1,265—Elizabeth City							
Station Hospital▲	Gen	Army	150	48	12	219	1,800
Fort Myer, 1,605—Arlington							
Station Hospital	Gen	Army	157	87	8	71	3,551
Franklin, 3,466—Southampton							
Raiford Memorial Hospital▲	Gen	NPAssn	56	42	15	214	1,848
Fredericksburg, 10,656—Spotsylvania							
Mary Washington Hospital	Gen	NPAssn	80	50	20	657	3,102
Front Royal, 3,831—Warren							
Front Royal Community Hospital	Gen	NPAssn	22	17	10	323	1,359
Gordonsville, 358—Orange							
Gordonsville Community Hospital	Gen	Indiv	20	12	5	62	392
Grundy, 1,476—Buchanan							
Grundy Hospital	Gen	Corp	30	27	8	145	1,494
Hampton, 5,892—Elizabeth City							
Dixie Hospital▲◇	Gen	NPAssn	135	97	30	891	5,442
Harrisonburg, 8,768—Rockingham							
Rockingham Memorial Hosp.◇	Gen	NPAssn	150	132	20	1,232	6,511
Hopewell, 8,678—Prince George							
John Randolph Hospital	Gen	NPAssn	40	18	16	312	1,004
Hot Springs, 1,000—Bath							
Community House	Gen	NPAssn	13	7	4	85	235
Kecoughtan, 1,000—Elizabeth City							
Veterans Admin. Hospital▲	Gen	Vet	604	478	..	....	3,729
Langley Field,—Elizabeth City							
Station Hospital▲	Gen	Army	100	73	..	....	2,003
Lebanon, 622—Russell							
Lebanon General Hospital	Gen	Indiv	20	15	8	228	885
Leesburg, 1,698—Loudoun							
Loudoun County Hospital	Gen	Corp	26	19	5	289	1,134
Lexington, 5,994—Rockbridge							
Stonewall Jackson Memorial Hospital	Gen	NPAssn	50	42	15	379	2,644
Luray, 1,511—Page							
Page Memorial Hospital	Gen	County	30	11	10	124	1,138
Lynchburg, 44,541—Campbell							
Guggenheimer Maternity Hospital	Unit of Marshall Lodge Memorial Hospital						
Lynchburg General Hosp.▲◇	Gen	City	150	111	27	820	4,805
Marshall Lodge Memorial Hospital▲	Gen	NPAssn	135	83	30	618	3,498
Virginia Baptist Hospital◇	Gen	Church	100	82	24	927	3,539
Marion, 5,177—Smyth							
Lee Memorial Hospital	Gen	NPAssn	84	62	18	395	5,274
Southwestern State Hospital▲	Ment	State	1,287	1,271	..	....	409
Martinsville, 10,666—Henry							
Henry County Memorial Hospital	Gen	Indiv	25	No data supplied			
Martinsville General Hospital	Gen	NPAssn	84	55	26	285	1,445
Nassawadox, 250—Northampton							
Northampton Accomac Memorial Hospital◇	Gen	NPAssn	76	55	18	517	2,990
Newport News, 37,067—Warwick							
Elizabeth Buxton Hosp.▲◇	Gen	Indiv	146	127	35	1,235	5,905
Riverside Hospital▲◇	Gen	NPAssn	225	131	35	1,328	5,484
Whittaker Memorial Hosp.▲	Gen	NPAssn	57	39	20	276	1,295
Norfolk, 144,332—Norfolk							
De Paul Hospital◆◆▲◇	Gen	Church	256	217	48	1,918	9,094
Grandy and Wise Hospital	TB	City	150	132	..	....	144
Hampton Roads Medical Center	Ven	USPHS	200	129	..	....	4,603
Leigh Memorial Hospital▲	Gen	NPAssn	166	120	40	1,312	5,780
McCoy Stokes Hospital	ENT	Part	11	4	..	....	696
Norfolk Community Hosp.▲	Gen	NPAssn	140	71	28	624	2,654
Norfolk General Hosp.◆◆▲◇	Gen	NPAssn	340	260	55	1,523	9,706
U. S. Marine Hospital◆▲	Gen	USPHS	420	280	..	....	5,601
U. S. Naval Air Station Dispensary	Gen	Navy	95	40	..	....	4,000
Norton, 4,096—Wise							
Dr. Bottis' Eye, Ear, Nose and Throat Hospital	ENT	Indiv	38	11	..	....	3,385
Norton Clinic Hospital	Gen	Indiv	30	21	5	85	1,570
Norton General Hospital	Gen	Indiv	37	32	10	296	1,651
Pennington Gap, 1,950—Lee							
Lee General Hospital	Gen	Corp	35	26	6	172	1,709
Petersburg, 30,631—Dinwiddie							
Central State Hospital▲	Ment	State	3,374	3,304	10	5	940
Federal Reformatory Hosp.	Inst	USPHS	46	16	..	....	845
Medical Center Hospital	Unit of Central State Hospital						
Petersburg Hospital◇	Gen	NPAssn	114	100	19	670	4,229
Petersburg State Colony	MeDe	State	250	218	..	....	61
Portsmouth, 50,745—Norfolk							
Kings Daughters Hospital◆▲◇	Gen	NPAssn	362	128	45	1,013	5,574
Maryview Hospital◆▲◇	Gen	Church	150	71	32	902	5,720
U. S. Naval Hospital◆▲	Gen	Navy	1,200	731	47	1,051	10,874
Pulaski, 9,702—Pulaski							
Pulaski Hospital▲	Gen	Corp	65	60	15	640	3,360
Quantico, 1,139—Prince William							
U. S. Naval Hospital	Gen	Navy	201	97	14	361	1,373
Radford, 6,980—Montgomery							
Radford Community Hosp.▲◇	Gen	NPAssn	74	59	20	657	3,474
St. Albans Sanatorium	N&M	Indiv	85	75	..	....	1,022
Richlands, 2,263—Tazewell							
Clinch Valley Clinic Hosp.▲	Gen	Corp	101	60	12	415	4,461
Mattie Williams Hospital	Gen	Indiv	75	43	8	198	1,982

Key to symbols and abbreviations is on page 1396

VIRGINIA—Continued

Hospitals and Sanatoriums	Type of Service	Ownership or Control	Beds	Average Census	Bassinets	Number of Births	Admissions
Richmond, 193,042—Henrico							
Crippled Children's Hosp.ΦA..	Orth	NPAssn	120	88	..	....	185
Dooley Hospital	Unit of Medical College of Va., Hosp. Div.						
Grace Hospital†ΦΔ◇	Gen	Corp	90	84	20	717	4,723
Johnston-Willis Hospital†ΦΔ◇	Gen	Corp	145	125	26	1,200	5,822
Medical College of Virginia, Hospital Division†ΦΔ◇	Gen	State	720	592	90	3,080	15,621
Memorial Hospital	Unit of Medical College of Va., Hosp. Div.						
Penitentiary Hospital	Inst	State	48	22	..	....	2,030
Pine Camp Hospital‡	TB	City	229	176	..	....	280
Retreat for the Sick†ΦΔ	Gen	NPAssn	106	109	25	1,196	4,670
Richmond Community Hosp..	Gen	NPAssn	35	33	8	280	991
Richmond Municipal Hospital	Ven	City	80	65	..	....	2,254
St. Elizabeth's Hospital†ΦΔ◇..	Gen	Corp	57	52	..	....	1,864
St. Luke's Hospital†ΦΔ◇	Gen	Corp	86	84	23	999	3,655
St. Philip Hospital	Unit of Medical College of Va., Hosp. Div.						
Sheltering Arms Hospital†ΦΔ..	Gen	NPAssn	83	50	17	329	1,640
Stuart Circle Hospital†ΦΔ◇	Gen	Corp	114	102	23	745	4,251
Tucker Hospital‡Δ	N&M	Corp	56	53	..	....	522
Veterans Admin. Hospital†ΦΔ..	Gen	Vet	1,000	838	..	....	8,510
Westbrook Sanatorium	N&M	Corp	140	139	..	....	542
Roanoke, 69,287—Roanoke							
Burrell Memorial Hospital‡Δ..	Gen	NPAssn	51	38	7	223	1,280
Gill Memorial Eye, Ear and Throat Hospital†ΦΔ	ENT	NPAssn	25	11	..	....	1,400
Jefferson Hospital†ΦΔ◇	Gen	NPAssn	150	134	30	977	5,172
Lewis-Gale Hospital†ΦΔ◇	Gen	NPAssn	190	144	29	1,286	6,395
Roanoke City Sanatorium‡Δ..	TB	City	52	25	..	....	94
Roanoke Hospital†ΦΔ◇	Gen	NPAssn	130	117	20	739	4,302
Shenandoah Hospital‡Δ	Gen	Corp	63	41	8	417	2,651
Veterans Admin. Hospital†ΦΔ..	Ment	Vet	2,000	1,832	..	....	4,024
Saltville, 2,650—Smyth							
Mathieson Hospital	Gen	NPAssn	17	15	5	140	672
South Boston, 5,252—Halifax							
South Boston Hospital	Gen	Corp	45	31	10	324	2,408
Staunton, 13,327—Augusta							
DeJarnette State Sanatorium	Ment	State	220	200	..	....	752
Kings Daughters Hospital‡Δ..	Gen	NPAssn	75	57	20	681	2,600
Western State Hospital	Ment	State	2,519	2,486	..	....	933
Stonega, 1,650—Wise							
Stonega Hospital	Indus	NPAssn	16	3	..	....	80
Stuart, 720—Patrick							
Stuart Hospital	Gen	Indiv	22	16	7	174	485
Suffolk, 11,343—Nansemond							
Lakeview Hospital‡Δ	Gen	NPAssn	62	53	15	581	2,086
Virginia General Hospital	Gen	NPAssn	14	6	6	150	373
University—Albemarle							
University of Virginia Hosp.	See Charlottesville, Va.						
Warrenton, 1,651—Fauquier							
Physicians Hospital	Gen	Corp	40	23	10	277	1 124
Waynesboro, 7,273—Augusta							
Waynesboro Community Hospital	Gen	NPAssn	38	25	12	437	1,479
Williamsburg, 3,942—James City							
Bell Hospital	Gen	Indiv	20	10	5	156	704
Eastern State Hospital‡	Ment	State	1,946	1,748	..	....	650
Winchester, 12,626—Frederick							
Winchester Memorial Hosp.ΦΔ◇	Gen	NPAssn	180	176	30	1,082	6,954
Woodstock, 1,546—Shenandoah							
Cora Miller Memorial Hosp..	Gen	Indiv	38	21	10	132	1,010

Related Institutions

Beaumont,—Powhatan							
Virginia Industrial School for Boys	Inst	State	21	4	..	....	209
Bristol, 9,795—Washington							
Grigsby's Hospital	Gen	Indiv	16	10	12	240	620
Colony, 108—Amherst							
Lynchburg State Colony‡	MDe	State	1,764	1,707	..	....	180
Medical Center Hospital‡Δ	Unit of Lynchburg State Colony						
Galax, 3,195—Grayson							
Waddell Hospital	Gen	Corp	44	21	8	163	1,005
Martinsville, 10,630—Henry							
St. Mary Hospital	Gen	Part	13	7	7	111	393
Richmond, 193,042—Henrico							
City Home Hospital	GenInst	City	450	291	30	24	681
State Farm, 75—Goochland							
State Farm Hospital	Inst	State	120	82	..	....	563
Sweet Briar, 200—Amherst							
Sweet Briar College Infirmary	Inst	NPAssn	15	3	..	....	187

WASHINGTON

Hospitals and Sanatoriums	Type of Service	Ownership or Control	Beds	Average Census	Bassinets	Number of Births	Admissions
Aberdeen, 18,846—Grays Harbor							
St. Joseph's Hospital‡Δ	Gen	Church	115	119	25	985	4,393
American Lake, 625—Pierce							
Veterans Admin. Hospital‡Δ..	Ment	Vet	1,000	640	..	....	502
Anacortes, 5,875—Skagit							
Anacortes Hospital	Gen	Corp	25	13	6	220	980
Auburn, 4,711—King							
Auburn General Hospital	Gen	Part	47	28	16	467	1,569
Bellingham, 29,514—Whatcom							
St. Frances Hospital	Gen	Indiv	33	13	..	....	210
St. Joseph's Hospital‡Δ◇	Gen	Church	110	104	19	1,029	5,402
St. Luke's General Hosp.ΦΔ◇..	Gen	NPAssn	70	71	12	664	3,557
Whatcom County Hospital...	Gen	County	102	50	9	31	697
Bremerton, 15,134—Kitsap							
Harrison Memorial Hospital‡Δ	Gen	NPAssn	120	79	40	1,198	5,558
Puget Sound Naval Memorial Hospital	Gen	County	130	82	30	980	4,000
U. S. Naval Hospital‡ΦΔ	Gen	Navy	630	512	17	429	5,497
Burlington, 1,622—Skagit							
Matthews General Hospital...	Gen	Indiv	30	15	6	144	891
Centralia, 7,414—Lewis							
Lewis County Hospital	Gen	County	51	32	16	492	1,900
Chehalis, 4,857—Lewis							
MacMillan Sanatorium	TB	Counties	63	35	..	....	30
St. Helen Hospital‡Δ	Gen	Church	40	34	13	451	1,770
Chewelah, 1,565—Stevens							
St. Joseph's Hospital	Gen	Church	40	25	10	150	1,327
Colfax, 2,953—Whitman							
Bryant and Weisman Clinic-Hospital	Gen	Part	70	43	15	....	1,000
St. Ignatius Hospital‡Δ	Gen	Church	60	45	17	380	2,202
Colville, 2,418—Stevens							
Mount Carmel Hospital	Gen	Church	45	40	12	236	1,575
Coulee Dam, 3,100—Douglas							
Coulee Dam Community Hospital	Gen	Indiv	40	16	12	212	1,311
Dayton, 5,026—Columbia							
Brining Memorial Hospital...	Gen	Indiv	22	17	4	145	660
Ellensburg, 5,944—Kittitas							
Ellenburg General Hospital‡Δ..	Gen	NPAssn	30	23	10	162	1,205
Kittitas County Hospital	Gen	County	55	30	6	72	550
Valley General Hospital	Gen	Indiv	17	15	9	232	963
Elma, 1,370—Grays Harbor							
Elma General Hospital	Gen	Part	23	17	6	117	923
Oakhurst Sanatorium	TB	County	100	68	..	....	65
Ephrata, 503—Grant							
Columbia Basin Hospital	Gen	Corp	25	15	7	176	1,023
Everett, 30,224—Snohomish							
General Hospital‡Δ◇	Gen	NPAssn	90	77	29	1,196	4,373
Providence Hospital‡Δ◇	Gen	Church	140	85	24	702	4,700
Fort Lewis,—Pierce							
Madigan General Hospital‡ΦΔ	Gen	Army	3,071	1,529	30	563	18,200
Fort Stellacoom, 2,080—Pierce							
Western State Hospital‡ΦΔ..	Ment	State	2,954	2,673	..	....	997
Kirkland, 2,084—King							
Fairfax Sanitarium	N&M	Indiv	50	40	..	....	300
Kirkland Hospital	Gen	Indiv	15	10	12	350	717
Lakeview, 200—Pierce							
Mountain View Sanatorium...	TB	County	96	84	..	....	85
Longview, 12,365—Cowlitz							
Cowlitz General Hospital	Gen	NPAssn	70	No data supplied			
St. John's Hospital‡Δ	Gen	Church	65	63	20	762	3,674
Medical Lake, 2,114—Spokane							
Eastern State Hospital‡ΦΔ..	Ment	State	2,273	2,057	..	....	605
Monroe, 1,300—Snohomish							
Valley View Hospital	Gen	County	72	55	6	98	384
Mount Vernon, 4,378—Skagit							
Bowley General Hospital	Gen	Indiv	44	34	10	264	1,611
Skagit General Hospital	Gen	NPAssn	36	29	12	185	1,238
Neopelem, 200—Okanogan							
Colville Indian Hospital	Gen	IA	36	29	4	94	627
Newport, 1,174—Pend Oreille							
Newport Community Hospital	Gen	NPAssn	25	13	6	178	702
Olympia, 13,254—Thurston							
St. Peter's Hospital‡Δ	Gen	Church	125	94	25	823	3,900
Pasco, 3,913—Franklin							
Our Lady of Lourdes Hosp.ΔA	Gen	Church	60	40	25	500	2,400
Port Angeles, 9,467—Clallam							
Davidson and Hay Hospital..	Gen	Indiv	53	41	12	195	1,600
Port Angeles General Hosp.Δ	Gen	NPAssn	90	66	18	439	2,200
Port Townsend, 4,628—Jefferson							
St. John's Hospital	Gen	Church	60	31	12	218	1,395
Pullman, 4,417—Whitman							
Finch Memorial Hospital	Gen	State	30	11	..	....	1,500
Puyallup, 7,502—Pierce							
Puyallup General Hospital...	Gen	Indiv	28	17	15	454	1,533
Renton, 4,488—King							
Renton Hospital	Gen	NPAssn	100	77	25	1,214	4,788
Richland, 247—Benton							
Kadlec Hospital	Gen	Fed	100	50	30	523	3,180
Seattle, 368,302—King							
Ballard General Hospital	Gen	NPAssn	35	30	12	293	1,973
Children's Orthopedic Hospital†ΦΔ◇	Orth	NPAssn	132	116	..	....	1,600
Cobb Hospital	Gen	Indiv	26	17	..	....	1,230
Columbus Hospital†ΦΔ◇	Gen	Church	200	134	44	1,138	5,634
Doctors Hospital†ΦΔ◇	Gen	NPAssn	200	135	68	1,697	7,347
Firland Sanatorium†ΦΔ	TB	County	700	233	..	....	215
King County Hospital, Unit No. 1 (Harborview)†ΦΔ◇	Gen	County	500	472	51	962	12,015
King County Hospital, Unit No. 2 (Georgetown Branch)	Chr	County	275	264	..	....	500
Laurel Beach Sanatorium‡Δ..	TB	Part	100	94	..	....	125
Maynard Hospital†ΦΔ	Gen	NPAssn	100	97	40	2,215	4,575
Medical and Dental Building Surgery	Surg	Indiv	20	15	..	....	3,153
Providence Hospital†ΦΔ◇	Gen	Church	357	317	77	2,371	10,749
Riverton Hospital for Diseases of the Chest‡	TB	NPAssn	100	66	..	....	111
St. Luke's Hospital	Gen	NPAssn	54	13	..	....	277
Seattle General Hospital†ΦΔ◇	Gen	NPAssn	115	111	30	1,168	4,977
Station Hospital	Gen	Army	400	219	..	....	6,281
Swedish Hospital†ΦΔ◇	Gen	NPAssn	300	291	74	2,668	10,204
U. S. Marine Hospital†ΦΔ◇..	Gen	USPHS	200	69	14	151	5,300
U. S. Naval Air Station Dispensary	Gen	Navy	90	11	16	210	1,895

Key to symbols and abbreviations is on page 1388

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WASHINGTON—Continued

Hospitals and Sanatoriums	Type of Service	Ownership or Control	Beds	Average Census †	Resolucts	Number of Births	Admissions †
University of Washington							
Infirmary	Inst	State	75	8	..	...	771
Virginia Mason Hospital●◆▲	Gen	NPAssn	207	187	36	1,430	8,573
Washington Infirmary	Ven	State	60	28	..	...	900
Washington Memorial Hosp.	Gen	NPAssn	16	8	..	...	444
Sedro Woolley, 2,954—Skagit							
Memorial Hospital	Gen	NPAssn	25	23	10	251	1,471
Northern State Hospital●◆	Ment	State	2,136	2,090	..	...	636
Shelton, 3,707—Mason							
Shelton General Hospital▲	Gen	NPAssn	55	40	13	335	1,697
Snohomish, 2,784—Snohomish							
Aldercrest Sanatorium	TB	County	60	42	..	...	55
Snohomish General Hospital	Gen	Indiv	16	No data supplied			
Snoqualmie Falls,—King							
Nelem's Memorial Hospital	Gen	Indiv	24	12	6	96	473
Spokane, 122,001—Spokane							
Booth Memorial Hospital	Mat	Church	40	29	20	160	163
Deaconess Hospital●◆▲	Gen	Church	200	190	44	2,000	9,040
Edgecliff Sanatorium	TB	County	145	122	..	...	112
Sacred Heart Hospital●◆▲	Gen	Church	400	374	60	2,288	12,080
St. Luke's Hospital●◆▲	Gen	NPAssn	295	227	36	1,257	7,686
Shriners Hospital for Crippled Children◆	Orth	NPAssn	24	20	..	...	85
Station Hospital▲	Gen	Army	100	110	..	114	4,859
Steilacoom, 852—Pierce							
U. S. Penitentiary Hospital▲	Inst	USPHS	94	32	..	...	861
Sunnyside, 2,308—Yakima							
Valley Memorial Hospital	Gen	NPAssn	23	22	15	558	1,791
Tacoma, 109,408—Pierce							
Doctors Hospital	Gen	NPAssn	63	47	..	...	...
Northern Pacific Beneficial Association Hospital▲	Gen	NPAssn	111	64	7	192	2,961
Pierce County Hospital●◆▲	Gen	Cy'Co	200	143	21	371	3,745
St. Joseph's Hospital●◆▲	Gen	Church	279	217	71	2,291	13,469
Station Hospital	Gen	Army	75	47	..	...	803
Tacoma General Hosp.●◆▲	Gen	NPAssn	213	180	70	2,928	8,259
Tacoma Indian Hospital▲	TB	IA	336	287	..	...	1,313
Tonasket, 643—Okanogan							
St. Martin's Hospital	Gen	Church	40	32	6	219	1,180
Vancouver, 18,788—Clark							
Clark County Hospital	Gen	County	78	57	6	76	1,028
Northern Permanente Hospital▲	Gen	NPAssn	200	173	45	594	4,286
St. Joseph's Hospital●◆▲	Gen	Church	120	81	40	1,187	5,869
Vancouver Memorial Hosp.▲	Gen	NPAssn	140	109	30	951	4,659
Veterans Admin. Hospital	Gen	Vet	600	494	..	...	3,851
Walla Walla, 18,108—Walla Walla							
Blue Mountain Sanatorium	TB	County	49	45	..	...	42
St. Mary's Hospital◆	Gen	Church	125	91	29	841	4,571
Veterans Admin. Hospital●▲	TB	Vet	421	373	..	...	969
Walla Walla General Hosp.▲	Gen	Church	58	47	14	420	2,287
Wenatchee, 11,020—Chelan							
Central Washington Deaconess Hospital◆	Gen	Church	50	54	20	676	2,331
St. Anthony's Hospital●◆	Gen	Church	75	57	20	521	2,997
Yakima, 27,221—Yakima							
St. Elizabeth Hospital◆	Gen	Church	258	198	48	2,345	10,935
Yakima County Hospital	Gen	County	90	75	7	222	1,749
Related Institutions							
Arlington, 1,460—Snohomish							
Arlington General Hospital	Gen	Indiv	17	9	6	145	555
Cle Elum, 2,230—Kittitas							
Roslyn Cle Elum Beneficial Company Hospital	Gen	NPAssn	24	13	1	10	500
Colville, 2,418—Stevens							
Valley View Hospital	Gen	County	30	31	4	11	167
Ione, 681—Pend Oreille							
Ione Hospital	Gen	Indiv	10	1	5	55	257
Medical Lake, 2,114—Spokane							
Lakeland Village	MeDe	State	1,436	1,413	..	...	44
Seattle, 368,302—King							
Shadel Sanitarium	Alcoh	Corp	42	35	..	...	883
Spokane, 122,001—Spokane							
Rivercrest Hospital	Iso	City	60	14	..	...	60
Tacoma, 109,408—Pierce							
Washington Minor Hospital	Gen	NPAssn	21	15	..	...	1,981
White Shield Home	Mat	NPAssn	21	21	10	56	53
Walla Walla, 18,108—Walla Walla							
Washington State Penitentiary Hospital	Inst	State	64	54	..	...	387
White Salmon, 985—Klickitat							
West Klickitat Hospital	Gen	Indiv	17	11	5	86	333
Yakima, 27,221—Yakima							
Yakima Valley Sanitarium	TB	Part	45	39	..	...	70

WEST VIRGINIA

Hospitals and Sanatoriums	Type of Service	Ownership or Control	Beds	Average Census †	Resolucts	Number of Births	Admissions †
Federal Reformatory for Women	Inst	USPHS	53	12	6	12	1,029
Barboursville, 1,458—Cabell							
Barboursville Unit of Huntington State Hospital	MeDe	State	316	314	..	...	...
Beckley, 17,852—Raleigh							
Beckley Hospital▲	Gen	Part	171	140	15	545	6,565
Pinecrest Sanitarium▲	TB	State	650	606	..	...	633
Raleigh General Hospital◆	Gen	Corp	100	85	15	504	3,570

WEST VIRGINIA—Continued

Hospitals and Sanatoriums	Type of Service	Ownership or Control	Beds	Average Census †	Resolucts	Number of Births	Admissions †
Bluefield, 20,641—Mercer							
Bluefield Sanitarium●▲	Gen	Corp	164	130	26	600	6,140
Brown's Hospital	Gen	Indiv	45	14	3	25	1,800
Providence Hospital	Gen	Part	25	6	4	50	622
St. Luke's Hospital◆	Gen	Corp	60	50	20	378	2,409
Buckhannon, 4,450—Upshur							
St. Joseph's Hospital▲	Gen	Church	44	29	14	387	1,196
Charleston, 67,914—Kanawha							
Charleston General Hosp.●◆▲	Gen	NPAssn	300	190	35	1,542	9,384
Kanawha Valley Hospital●▲	Gen	Corp	150	122	15	684	4,567
McMillan Hospital●▲	Gen	Corp	100	74	20	807	4,855
Mountain State Memorial Hospital◆	Gen	NPAssn	88	75	12	625	6,029
St. Francis Hospital●▲	Gen	Church	130	112	30	1,137	6,384
Salvation Army Hospital	Gen	Church	28	13	9	242	977
Staats Hospital	Gen	Corp	62	40	12	784	2,168
Charles Town, 2,936—Jefferson							
Charles Town General Hosp.	Gen	NPAssn	21	12	8	284	757
Clarksburg, 30,579—Harrison							
St. Mary's Hospital●◆▲	Gen	Church	205	174	39	1,205	6,321
Union Protestant Hospital◆	Gen	NPAssn	60	52	18	781	9,261
Denmar, 100—Pocahontas							
Denmar Sanatorium	TB	State	125	108	..	...	100
East Rainelle, 1,515—Greenbrier							
East Rainelle General Hosp.	Gen	Corp	35	16	10	152	785
Elkins, 8,135—Randolph							
Davis Memorial Hospital◆	Gen	NPAssn	87	53	19	451	2,677
Elkins City Hospital▲	Gen	Corp	66	No data supplied			
Fairmont, 23,105—Marion							
Fairmont Emergency Hosp.▲	Gen	State	68	51	10	173	1,727
Fairmont General Hosp.●▲	Gen	City	139	121	18	1,180	5,003
Gassaway, 1,429—Braxton							
Gassaway Hospital	Gen	Corp	18	14	7	143	597
Glen Dale, 1,348—Marshall							
Reynolds Memorial Hosp.▲◆	Gen	Church	98	74	19	636	2,905
Grafton, 7,431—Taylor							
Grafton City Hospital	Gen	City	66	59	12	988	1,750
Hinton, 5,815—Summers							
Hinton Hospital▲	Gen	Corp	75	49	12	173	9,148
Holden, 3,696—Logan							
Holden Hospital	Gen	Part	35	16	9	17	1,142
Hopemont, 425—Preston							
Conley Hospital	Unit of Hopemont Sanitarium						
Hopemont Sanitarium●▲	TB	State	475	377	..	...	361
Huntington, 78,836—Cabell							
Chesapeake and Ohio Hospital●◆▲	Gen	NPAssn	165	136	20	108	5,746
Huntington Memorial Hospital◆	Gen	NPAssn	130	74	22	732	3,594
Huntington Orthopedic Hospital▲	Orth	NPAssn	120	55	..	...	522
Huntington State Hospital	Ment	State	1,108	987	..	...	658
St. Mary's Hospital●◆▲	Gen	Church	300	266	50	2,161	14,212
Veterans Admin. Hospital▲	Gen	Vet	300	267	..	...	3,219
Keyser, 6,177—Mineral							
Potomac Valley Hospital	Gen	Corp	61	45	28	533	2,672
Kingwood, 1,676—Preston							
Kercheval Memorial Clinic-Hospital	Gen	Corp	10	6	6	113	381
Lakin, 50—Mason							
Lakin State Hospital	Ment	State	410	406	..	...	146
Logan, 5,166—Logan							
Logan General Hospital▲◆	Gen	Corp	100	58	30	546	4,028
Mercy Hospital	Gen	Corp	65	56	5	125	2,561
Madison, 1,365—Boone							
Madison General Hospital	Gen	Corp	35	14	6	168	1,193
Marlinton, 1,644—Pocahontas							
Pocahontas Memorial Hosp.	Gen	County	30	17	6	143	1,161
Martinsburg, 15,063—Berkeley							
City Hospital◆	Gen	NPAssn	85	64	15	376	1,558
Kings Daughters Hospital▲	Gen	NPAssn	96	75	18	611	2,547
Veterans Admin. Center	Gen	Vet	700	423	..	...	1,930
Milton, 1,641—Cabell							
Morris Memorial Hospital●▲	Orth	NPAssn	125	60	..	...	398
Montgomery, 3,231—Fayette							
Laird Memorial Hospital●▲	Gen	Corp	127	100	13	497	5,216
Morgantown, 16,655—Monongalia							
Heiskell Memorial Hospital◆	Gen	Indiv	90	78	25	605	4,160
Monongalia General Hosp.▲	Gen	NPAssn	125	85	23	880	3,691
New Martinsville, 5,491—Wetzel							
Wetzel County Hospital	Gen	NPAssn	30	23	7	479	1,500
Oak Hill, 3,213—Fayette							
Oak Hill Hospital▲	Gen	Part	75	46	9	302	2,320
Parkersburg, 30,103—Wood							
Camden-Clark Memorial Hospital●▲◆	Gen	City	154	...	33	...	...
St. Joseph's Hospital●◆▲	Gen	Church	170	157	35	1,181	6,947
Parsons, 2,677—Tucker							
Tucker County Hospital	Gen	Corp	36	25	10	118	864
Philippi, 1,955—Barbour							
Myers Clinic Hospital●◆	Gen	Part	70	60	12	297	2,702
Princeton, 7,426—Mercer							
Mercer Memorial Hospital▲	Gen	Corp	57	35	12	502	2,085
Ravenswood, 1,661—Jackson							
Ravenswood Hospital	Gen	Indiv	15	7	6	53	190
Richwood, 5,851—Nicholas							
McClung Hospital	Gen	Indiv	35	7	12	160	740
Sacred Heart Hospital	Gen	Church	34	29	10	226	1,726
Ronceverte, 2,265—Greenbrier							
Greenbrier Valley Hospital▲	Gen	Corp	50	33	9	156	1,476

Key to symbols and abbreviations is on page 1398

WEST VIRGINIA—Continued

Hospitals and Sanatoriums	Type of Service	Ownership or Control	Beds	Average Census †	Bassinets	Number of Births	Admissions †
South Charleston, 10,377—Kanawha							
Dunn Hospital	Gen	Indiv	30	11	12	199	834
Herbert J. Thomas Memorial Hospital	Gen	NPAssn	77	54	16	353	1,884
Kanawha Valley Medical Center	Yen	State	207	130	7	...	4,359
Spencer, 2,497—Roane							
Du Pue Hospital	Gen	Indiv	21	11	5	162	505
Spencer State Hospital	Ment	State	973	953	..	...	551
Triadelphia, 350—Ohio							
Ohio County Tuberculosis Sanatorium	TB	County	37	35	..	...	18
Welch, 6,264—McDowell							
Grace Hospital△	Gen	Corp	143	119	12	190	5,300
Stevens Clinic Hospital△	Gen	Corp	140	94	15	333	5,670
Welch Emergency Hospital	Gen	State	85	51	10	84	1,656
Weston, 8,268—Lewis							
General Hospital	Gen	Indiv	44	26	10	193	1,316
Weston City Hospital	Gen	Corp	35	9	7	196	944
Weston State Hospital△	Ment	State	1,917	1,812	..	...	678
Wheeling, 61,089—Ohio							
Ohio Valley General Hosp.*△○	Gen	NPAssn	320	310	40	1,401	8,887
Wheeling Hospital*△○	Gen	Church	250	235	40	1,331	7,498
Williamson, 8,366—Mingo							
Williamson Memorial Hosp.△○	Gen	Indiv	108	78	9	492	4,217
Related Institutions							
Berkeley Springs, 1,145—Morgan							
Morgan County War Memorial Hospital	Gen	County	39	...	3	Estab. 1947	
Charleston, 67,914—Kanawha							
Hillcrest Sanatorium	TBChil	NPAssn	52	39	..	...	59
Huntington, 78,836—Cabell							
Owen Clinic Hospital	N&M	Corp	15	6	..	...	20
Rowley Clinic Hospital	Gen	Indiv	26	16	12	178	1,004
Moundsville, 14,108—Marshall							
West Virginia Penitentiary Hospital	Inst	State	60	20	..	...	650
St. Marys, 2,201—Pleasants							
West Virginia Training School	McDe	State	130	113	..	...	22

WISCONSIN

Hospitals and Sanatoriums	Type of Service	Ownership or Control	Beds	Average Census †	Bassinets	Number of Births	Admissions †
Adams, 1,310—Adams							
Adams-Friendship Hospital	Gen	NPAssn	8	6	2	93	246
Algoma, 2,652—Kewaunee							
Algoma Hospital	Gen	NPAssn	14	8	4	150	600
Amery, 1,461—Polk							
Amery Hospital	Gen	NPAssn	19	14	5	205	647
Antigo, 9,495—Langlade							
Langlade County Memorial Hospital	Gen	Church	50	54	12	600	2,340
Appleton, 28,436—Outagamie							
St. Elizabeth Hospital*△	Gen	Church	200	155	50	2,679	6,871
Arcadia, 1,830—Trempealeau							
St. Joseph's Hospital	Gen	Church	25	20	6	186	973
Ashland, 11,101—Ashland							
St. Joseph's Hospital	Gen	Church	132	80	18	464	3,773
Trinity Hospital	Gen	Church	60	43	9	256	1,700
Baldwin, 918—St. Croix							
Baldwin Community Hospital	Gen	NPAssn	16	10	6	221	724
Baraboo, 6,415—Sauk							
St. Mary's Ringling Hospital	Gen	Church	85	62	20	566	2,501
Barron, 2,659—Barron							
Barron City Hospital	Gen	Part	12	8	4	120	300
Bayfield, 1,212—Bayfield							
Pureair Sanatorium	TB	Counties	65	59	..	...	97
Beaver Dam, 10,356—Dodge							
Lutheran Deaconess Hospital	Gen	Church	55	44	12	568	1,826
St. Joseph's Hospital	Gen	Church	70	63	19	565	2,948
Beloit, 25,595—Rock							
Beloit Municipal Hospital	Gen	City	120	102	32	1,233	4,910
Berlin, 4,247—Green Lake							
Berlin Memorial Hospital	Gen	NPAssn	36	28	13	339	2,378
Black River Falls, 2,539—Jackson							
Krohn Clinic and Hospital	Gen	Part	29	25	10	275	838
Boscobel, 2,998—Grant							
Brookside-Parker Hospital	Gen	Part	22	15	8	161	567
Burlington, 4,414—Racine							
Burlington Memorial Hosp.△	Gen	NPAssn	35	25	10	384	1,366
Chippewa Falls, 10,508—Chippewa							
Northern Wisconsin Colony and Training School	McDe	State	1,429	1,330	11	3	201
St. Joseph's Hospital	Gen	Church	150	124	25	602	4,744
Columbus, 2,705—Columbia							
St. Mary's Hospital	Gen	Church	50	34	14	285	1,374
Cumberland, 1,539—Barron							
Cumberland Hospital	Gen	NPAssn	21	10	5	149	488
Dodgeville, 2,369—Iowa							
Dodgeville General Hospital	Gen	NPAssn	23	19	5	129	756
St. Joseph's Hospital	Gen	Church	61	53	16	394	1,583
Eau Claire, 30,745—Eau Claire							
Luther Hospital*△○	Gen	NPAssn	188	153	30	1,112	6,356
Mt. Washington Sanatorium	TB	County	91	88	..	...	80
Sacred Heart Hospital	Gen	Church	185	172	15	720	7,128
Edgerton, 3,266—Rock							
Edgerton Memorial Hospital	Gen	NPAssn	31	25	10	220	1,127

WISCONSIN—Continued

Hospitals and Sanatoriums	Type of Service	Ownership or Control	Beds	Average Census †	Bassinets	Number of Births	Admissions †
Elkhorn, 2,382—Walworth							
Lakeland Hospital△	Gen	County	85	61	19	681	2,470
Fond du Lac, 27,209—Fond du Lac							
St. Agnes Hospital*△○	Gen	Church	280	275	56	1,375	8,200
Fort Atkinson, 6,153—Jefferson							
Fort Atkinson Memorial Hospital	Gen	NPAssn	19	16	8	255	871
Frederic, 725—Polk							
Frederic Municipal Hospital	Gen	City	30	16	6	221	825
Grantsburg, 874—Burnett							
Community Hospital	Gen	NPAssn	32	25	5	92	545
Green Bay, 66,235—Brown							
Bellin Memorial Hospital*△○	Gen	Church	97	104	22	900	3,969
St. Mary's Hospital*○	Gen	Church	160	78	25	947	4,165
St. Vincent's Hospital	Gen	Church	222	213	28	1,275	10,102
Hartford, 3,910—Washington							
St. Joseph's Hospital	Gen	Church	58	30	15	299	1,098
Hawthorne, 75—Douglas							
Middle River Sanatorium△	TB	County	142	86	..	...	124
Hayward, 1,571—Sawyer							
Hayward Indian Hospital	Gen	IA	45	25	9	108	800
Hazel Green, 582—Grant							
Hazel Green Hospital	Gen	Indiv	25	17	8	149	1,041
Hillsboro, 1,146—Vernon							
Hansberry Hospital	Gen	Indiv	30	7	5	147	961
Iola, 746—Waupaca							
Iola Hospital	Gen	NPAssn	20	9	6	94	565
Janesville, 27,992—Rock							
Mercy Hospital*△○	Gen	Church	120	113	30	874	5,983
Pinehurst Sanatorium△	TB	County	75	67	..	...	77
Jefferson, 3,650—Jefferson							
Forest Lawn Sanatorium	TB	County	58	56	..	...	95
Kaukauna, 7,282—Outagamie							
Riverview Sanatorium△	TB	County	65	52	..	...	99
Kenosha, 47,595—Kenosha							
Kenosha Hospital	Gen	NPAssn	150	99	30	766	4,586
St. Catherine's Hospital△	Gen	Church	78	75	24	906	4,581
Willowbrook Sanatorium△	TB	County	40	31	..	...	33
Keshena, 500, Shawano							
St. Joseph's Indian Hospital	Gen	Fed	63	31	9	126	938
Kewaunee, 2,535—Kewaunee							
Witzpatck-Neseman Hospital	Gen	Part	10	4	5	150	290
La Crosse, 47,707—La Crosse							
Grandview Hospital	Gen	NPAssn	90	51	10	226	1,955
La Crosse Hospital	Gen	NPAssn	36	27	8	98	775
La Crosse Lutheran Hosp.*△○	Gen	Church	140	126	12	371	5,013
St. Ann's Hospital	Unit of St. Francis Hospital						
St. Francis Hospital*△○	Gen	Church	292	269	48	1,747	7,916
Ladysmith, 3,671—Rusk							
St. Mary's Hospital	Gen	Church	44	37	12	388	2,518
Lancaster, 2,962—Grant							
Doolittle-Glynn Hospital	Gen	Part	18	6	4	142	373
Lancaster General Hospital	Gen	Part	15	8	8	134	298
Laona, 1,806—Forest							
Ovitz Hospital	Gen	Part	20	7	6	144	317
Madison, 67,447—Dane							
Lake View Sanatorium△	TB	County	142	132	..	...	128
Madison General Hosp.*△○	Gen	NPAssn	177	179	26	1,218	6,714
Methodist Hospital*△○	Gen	Church	110	100	21	265	4,731
Morningside Sanatorium	TB	NPAssn	50	43	..	...	43
St. Mary's Hospital*△○	Gen	Church	200	180	50	1,867	7,739
State of Wisconsin General Hospital*△○	Gen	State	750	594	22	429	12,498
Wisconsin Orthopedic Hospital for Children	Unit of State of Wisconsin General Hosp.						
Wisconsin Psychiatric Institute	Unit of State of Wisconsin General Hosp.						
Manitowoc, 24,804—Manitowoc							
Holy Family Hospital	Gen	Church	165	161	32	1,209	6,964
Marinette, 14,185—Marinette							
Marinette General Hospital	Gen	County	80	73	25	656	3,441
Marshfield, 10,359—Wood							
St. Joseph's Hosp.tal*△○	Gen	Church	198	170	18	1,108	7,053
Mauston, 2,621—Juneau							
Mauston Hospital	Gen	Corp	45	30	10	249	1,239
Medford, 2,561—Taylor							
Medford Clinic Hospital	Gen	Corp	38	25	12	299	1,373
Mendota, 400—Dane							
Mendota State Hospital	Ment	State	800	747	..	...	1,112
Veterans Admin. Hospital*△	Ment	Vet	257	201	..	...	402
Menomonie, 6,582—Dunn							
Menomonie City Hospital	Gen	City	28	35	12	292	924
Merrill, 8,711—Lincoln							
Holy Cross Hospital△	Gen	Church	64	54	11	432	2,387
Lincoln County Hospital	InstGen	County	23	18	4	...	136
Milwaukee, 587,472—Milwaukee							
Columbia Hospital*△○	Gen	NPAssn	150	133	35	1,128	4,821
Evangelical Deaconess Hospital*△○	Gen	Church	135	117	32	1,660	6,677
Johnston Emergency Hosp.△	Emer	City	25	25	4	9	4,739
Milwaukee Children's Hospital*△○	Chil	NPAssn	150	119	..	...	4,915
Milwaukee County Asylum for Chronic Insane	Ment	County	1,993	2,130	..	...	325
Milwaukee County Hosp.*△○	Gen	County	900	685	33	413	16,335
Milwaukee County Hospital for Mental Diseases*△	Ment	County	1,615	1,895	..	...	993
Milwaukee Hospital*△○	Gen	Church	290	222	69	2,737	10,742
Milwaukee Sanitarium	See Wauwatosa						
Misericordia Hospital*△○	Gen	Church	110	95	30	1,563	4,764
Mount Sinai Hospital*△○	Gen	NPAssn	175	160	40	1,956	7,797
Muirdale Sanatorium*△	TB	County	265	263	..	...	402

Key to symbols and abbreviations is on page 1500

WISCONSIN—Continued

Hospitals and Sanatoriums	Type of Service	Ownership or Control	Beds	Average Census †	Bassinets	Number of Births	Admissions †
Sacred Heart Sanitarium♣◇	Gen	Church	250	211	..	....	2,407
St. Anthony Hospital	Gen	Church	111	56	40	1,253	3,602
St. Joseph's Hospital♣♦◇	Gen	Church	350	294	85	3,433	12,579
St. Luke's Hospital♣◇△	Gen	Church	135	97	28	1,444	5,263
St. Mary's Hill Sanitarium♣	N&M	Church	100	79	..	....	367
St. Mary's Hospital♣△◇	Gen	Church	210	185	42	1,913	7,379
St. Michael Hospital♣◇	Gen	Church	135	110	25	749	4,414
Shorewood Hospital Sanitarium♣	N&M	Corp	55	48	..	....	365
South View Hospital♣	Iso	City	226	30	..	....	953
Stark Hospital	Unit of Milwaukee Children's Hospital						
Veterans Admin. Hospital♣△◇	Gen	Vet	1,661	1,325	..	2	6,830
West Side Hospital	Gen	NPAssn	35	21	14	236	1,066
Mondovi, 2,077—Buffalo							
Gillette Hospital	Gen	Part	22	9	4	109	494
Mondovi Clinic Hospital	Gen	Indiv	17	11	6	77	346
Monroe, 6,182—Green							
St. Clare Hospital	Gen	Church	75	75	20	660	3,983
Neenah, 10,645—Winnebago							
Theda Clark Memorial Hosp.♣	Gen	NPAssn	65	61	18	780	2,671
Neillsville, 2,762—Clark							
Neillsville Hospital	Gen	Part	22	11	9	190	815
New London, 4,825—Waupaca							
Borchardt Clinic Memorial Hospital	Gen	NPAssn	15	10	6	92	518
Community Hospital	Gen	Church	50	47	14	476	1,729
Oconomowoc, 4,563—Waukesha							
Rogers Memorial Sanitarium.	N&M	NPAssn	54	47	..	....	123
Summit Hospital	Gen	Corp	46	42	6	145	641
Oconto Falls, 1,883—Oconto							
Oconto Falls Hospital	Gen	City	20	10	8	242	680
Onalaska, 1,742—La Crosse							
Oak Forest Sanatorium	TB	County	60	50	..	....	53
Osceola, 642—Polk							
Ladd Memorial Hospital	Gen	Indiv	14	7	2	64	457
Oshkosh, 29,080—Winnebago							
Mercy Hospital♣◇	Gen	Church	189	163	50	1,305	5,780
Park Falls, 3,252—Price							
Park Falls Hospital	Gen	Indiv	25	14	4	229	752
Platteville, 4,762—Grant							
Wilson Cunningham Hospital	Gen	Part	25	10	8	150	366
Plum City, 538—Pierce							
Plum City Hospital	Gen	NPAssn	16	12	5	123	611
Plymouth, 4,170—Sheboygan							
Plymouth Hospital	Gen	Church	42	22	14	257	778
Rocky Knoll Sanatorium♣	TB	County	80	48	..	....	49
Portage, 7,016—Columbia							
St. Savior's General Hospital.	Gen	Church	90	73	14	544	2,807
Port Washington, 4,046—Ozaukee							
St. Alphonsus Hospital	Gen	Church	70	62	15	469	2,037
Prairie du Chien, 4,622—Crawford							
Beaumont Hospital	Gen	NPAssn	21	13	8	170	483
Prairie du Chien Sanitarium Hospital	Gen	NPAssn	55	37	8	221	2,135
Prescott, 837—Pierce							
St. Croixdale Sanitarium.	Gen	N&M	Corp	66	60	2	55	290
Racine, 67,195—Racine							
St. Luke's Hospital♣◇	Gen	Church	110	96	40	1,226	4,429
St. Mary's Hospital♣△	Gen	Church	220	130	31	1,256	5,572
Sunny Rest Sanatorium	TB	County	82	69	..	....	76
Reedsburg, 3,608—Sauk							
Reedsburg Municipal Hospital	Gen	City	30	25	10	349	1,212
Rhinelander, 8,501—Oneida							
St. Mary's Hospital	Gen	Church	75	67	10	616	3,222
Rice Lake, 5,719—Barron							
Lakeside Methodist Hospital.	Gen	Church	50	36	14	354	1,605
St. Joseph's Hospital	Gen	Church	40	29	11	389	2,304
Richland Center, 4,—Richland							
Richland Hospital	Gen	NPAssn	73	60	15	704	2,833
Ripon, 4,956—Fond du Lac							
Ripon Municipal Hospital	Gen	City	25	18	10	219	1,068
River Falls, 2,966—Pierce							
City Hospital	Gen	City	25	20	8	232	671
St. Croix Falls, 1,007—Polk							
St. Croix Falls Hospital	Gen	NPAssn	21	13	4	101	531
Shawano, 5,565—Shawano							
Shawano Municipal Hospital.	Gen	NPAssn	65	62	20	527	2,266
Sheboygan, 40,638—Sheboygan							
St. Nicholas Hospital	Gen	Church	208	205	40	1,302	6,699
Sheboygan Memorial Hospital	Gen	NPAssn	100	78	20	490	2,924
Shullsburg, 1,107—Lafayette							
Shullsburg Hospital	Gen	Indiv	12	7	4	9	129
South Milwaukee, 11,134—Milwaukee							
South Milwaukee Hospital	Gen	Indiv	16	12	6	361	755
Sparta, 5,630—Monroe							
St. Mary's Hospital	Gen	Church	65	45	20	667	2,531
Stanley, 2,021—Chippewa							
Victory Memorial Hospital	Gen	NPAssn	21	18	7	351	1,404
Stateson, 110—Waukesha							
Wisconsin State Sanatorium♣◇	TB	State	241	146	..	....	98
Stevens Point, 15,777—Portage							
River Pines Sanatorium♣	TB	Church	62	60	..	....	51
St. Michael's Hospital	Gen	Church	135	121	35	826	4,864
Stoughton, 4,743—Dane							
Stoughton Hospital	Gen	NPAssn	30	26	12	318	1,129
Sturgeon Bay, 5,439—Door							
Door County Memorial Hosp.	Gen	NPAssn	60	37	21	400	2,227
Superior, 35,136—Douglas							
St. Francis Hospital	Gen	Church	50	48	15	329	1,597
St. Joseph's Hospital	Gen	Church	38	31	14	511	1,321
St. Mary's Hospital♦	Gen	Church	133	107	28	402	3,388
Tomah, 5,817—Monroe							
Veterans Admin. Hospital	Ment	Vet	1,172	....	..	Estab. 1947	

WISCONSIN—Continued

Hospitals and Sanatoriums	Type of Service	Ownership or Control	Beds	Average Census †	Bassinets	Number of Births	Admissions †
Tomahawk, 3,365—Lincoln							
Sacred Heart Hospital	Gen	Church	42	34	6	153	1,067
Two Rivers, 10,302—Manitowoc							
Two Rivers Municipal Hosp.	Gen	City	47	35	12	451	1,988
Union Grove, 975—Racine							
Southern Wisconsin Colony and Training School	MeDe	State	913	875	..	....	151
Veterans Administration,—Milwaukee							
Veterans Admin. Hospital	See Milwaukee						
Viroqua, 3,549—Vernon							
Viroqua Hospital	Gen	Corp	28	26	7	372	1,378
Washburn, 2,363—Bayfield							
Washburn Hospital	Gen	NPAssn	15	9	5	36	349
Watertown, 11,501—Jefferson							
St. Mary's Hospital	Gen	Church	80	67	20	738	2,901
Waukesha, 19,242—Waukesha							
Milwaukee Children's Hospital Convalescent Home	Unit of Milwaukee Children's Hospital						
Veterans Admin. Hospital♣	TB	Vet	232	214	..	....	258
Waukesha Memorial Hosp.♣△	Gen	City	95	70	31	1,181	3,588
Waupaca, 3,458—Waupaca							
City Hospital	Gen	Indiv	12	9	5	74	320
Waupaca Hospital and Clinic	Gen	Part	18	12	6	100	419
Waupun, 6,788—Fond du Lac							
Central State Hospital	Ment	State	350	340	..	....	78
Wausau, 27,268—Marathon							
Mount View Sanitarium	TB	County	74	60	..	....	66
St. Mary's Hospital♣◇	Gen	Church	205	186	45	1,140	7,759
Wausau Memorial Hospital♣△	Gen	NPAssn	95	81	25	656	3,431
Wauwatosa, 27,769—Milwaukee							
Milwaukee Sanitarium♣△	N&M	Corp	147	132	..	....	412
West Bend, 3,452—Washington							
St. Joseph's Hospital	Gen	Church	100	55	24	410	2,100
West de Pere,—Brown							
Hillcrest Grove Sanatorium	TB	County	86	75	..	....	62
Whitehall, 1,035—Trempealeau							
Whitehall Community Hosp.	Gen	NPAssn	34	32	9	229	1,470
Whitelaw, 225—Manitowoc							
Maple Crest Sanatorium	TB	County	52	33	..	....	34
Wild Rose, 529—Waupaca							
Wild Rose Hospital	Gen	Indiv	24	17	6	107	847
Winnebago, 150—Winnebago							
Sunny View Sanatorium	TB	Counties	77	75	..	....	95
Winnebago State Hospital♣	Ment	State	949	898	..	....	1,138
Wisconsin Rapids, 11,476—Wood							
Riverview Hospital	Gen	NPAssn	85	56	24	786	2,939
Wood,—Milwaukee							
Veterans Admin. Hospital	See Milwaukee						

Related Institutions

Appleton, 28,436—Outagamie							
Outagamie County Hospital	Ment	County	268	268	..	....	40
Chippewa Falls, 10,326—Chippewa							
Chippewa County Hospital	Ment	County	375	370	..	....	79
Dodgeville, 2,939—Iowa							
Iowa County Hospital	Ment	County	100	100	..	....	18
Eau Claire, 36,745—Eau Claire							
Eau Claire County Hospital	Ment	County	250	246	..	....	49
Elkhorn, 2,382—Walworth							
Walworth County Hospital	Ment	County	250	233	..	....	35
Fond du Lac, 27,209—Fond du Lac							
Fond du Lac County Hosp.	Ment	County	332	313	..	....	40
Green Bay, 46,235—Brown							
Brown County Hospital	Ment	County	316	309	..	....	57
Wisconsin State Reformatory Hospital	Inst	State	10	3	..	....	140
Itasca,—Douglas							
Douglas County Hospital and Tuberculosis Sanatorium	MentTb	County	362	321	..	....	79
Parkland Sanatorium	Unit of Douglas County Hospital and Tuberculosis Sanatorium						
Janesville, 27,092—Rock							
Rock County Hosp. and Home	Ment	County	370	317	..	....	98
Jefferson, 3,603—Jefferson							
Jefferson County Hospital	Ment	County	276	273	..	....	33
Juneau, 1,301—Dodge							
Dodge County Institutions	Ment	County	307	300	..	....	216
Kewaunee, 2,353—Kewaunee							
Casella Hospital	Gen	Part	8	2	2	34	125
Lake Tomahawk, 165—Oneida							
Lake Tomahawk State Camp	TB	State	49	27	..	....	35
Lancaster, 2,963—Grant							
Grant County Hospital	Ment	County	246	235	..	....	97
Madison, 67,447—Dane							
East Washington Avenue Hospital	Iso	City	50	5	..	....	108
Manitowoc, 24,494—Manitowoc							
Manitowoc County Hospital	Ment	County	222	222	..	....	31
Marshfield, 10,359—Wood							
Wood County Hospital	Ment	County	252	251	..	....	25
Menomonie, 6,562—Dunn							
Dunn County Hospital	Ment	County	186	186	..	....	29
Milwaukee, 587,472—Milwaukee							
Layton Home	Unit of Milwaukee Hospital						
Milwaukee County Home for Dependent Children	Inst	County	75	74	..	....	2,445
St. Camillus Hospital	Chr	Church	83	83	..	....	60
Salvation Army Martha Washington Women's Home and Hospital	Mat	Church	76	51	15	220	251
Shore View Home	Convl	Corp	50	32	..	....	129
Monroe, 6,182—Green							
Green County Hospital	Ment	County	274	265	..	....	74

Key to symbols and abbreviations is on page 1396

WISCONSIN—Continued

Related Institutions	Type of Service	Ownership or Control	Beds	Average Census	Bassinets	Number of Births	Admissions
New Richmond, 2,388—St. Croix							
St. Croix County Hospital	Ment	County	182	179	..	...	25
Oconto, 3,362—Oconto							
Oconto County and City Hospital	Gen	NPAssn	42	16	15	165	595
Oshkosh, 39,085—Winnebago							
Alexian Brothers Hospital	N&M	Church	84	81	..	...	62
Owen, 1,083—Clark							
Clark County Hospital	Ment	County	385	380	..	...	23
Peshtigo, 1,947—Marinette							
Marinette County Hospital	Ment	County	310	284	..	...	24
Racine, 67,196—Racine							
Lincoln Memorial Hospital	Iso	City	50	15	..	...	300
Racine County Asylum	Ment	County	292	285	..	...	62
Racine County Hospital	Inst[Gen	County	51	45	..	...	41
Reedsburg, 3,686—Sauk							
Sauk County Hospital and Home	Ment	County	230	220	..	...	45
Richland Center, 4,304—Richland							
Richland County Hospital	Ment	County	154	147	..	...	3
Shawano, 5,565—Shawano							
Shawano County Hospital	Ment	County	190	191	..	...	29
Sheboygan, 40,638—Sheboygan							
Sheboygan County Hospital for Chronic Insane	Ment	County	300	288	..	...	67
Shell Lake, 872—Washburn							
Shell Lake Hospital	Gen	NPAssn	12	...	6	Estab.	1947
Sparta, 5,820—Monroe							
Monroe County Hospital	Ment	County	190	187	..	...	20
Sturgeon Bay, 5,439—Door							
Olsen Hospital	Gen	Indiv	14	10	3	20	180
Superior, 35,136—Douglas							
Douglas County Hospital and Tuberculosis Sanatorium	See Itasca						
Verona, 535—Dane							
Dane County Hospital and Home	Ment	County	293	285	..	...	21
Viroqua, 3,549—Vernon							
Vernon County Hospital	Ment	County	165	163	..	...	20
Watertown, 11,501—Jefferson							
Bethesda Lutheran Home	MeDe	Church	370	350	..	...	7
Waukesha, 19,242—Waukesha							
Waukesha County Mental Hospital	Ment	County	220	205	..	...	80
Waupun, 6,758—Fond du Lac							
Wisconsin State Prison Hosp.	Inst	State	21	18	..	...	276
Wausau, 27,268—Marathon							
Marathon County Hospital	Ment	County	225	223	..	...	53
Marathon County Home and Hospital	Inst	County	65	63	..	...	98
Wauwatosa, 27,760—Milwaukee							
Milwaukee County Home for Dependent Children	See Mil						
St. Camillus Hospital	See Mil.						
Salvation Army Martha Washington Women's Home and Hospital	See Milwaukee						
West Bend, 5,422—Washington							
Washington County Hospital	Ment	County	172	154	..	...	154
West Salem, 1,254—La Crosse							
La Crosse County Hospital	Ment	County	302	280	..	...	28
Weyauwega, 1,173—Waupaca							
Waupaca County Hospital	Ment	County	120	105	..	...	15
Whitehall, 1,625—Trempealeau							
Trempealeau County Hospital	Ment	County	162	150	..	...	157
Winnebago, 138—Winnebago							
Winnebago County Hospital	Ment	County	265	266	..	...	33
Wyocena, 768—Columbia							
Columbia County Hospital	Ment	County	320	306	..	...	28

WYOMING

Hospitals and Sanatoriums	Type of Service	Ownership or Control	Beds	Average Census	Bassinets	Number of Births	Admissions
Afton, 1,211—Lincoln							
Latter Day Saints Star Valley Hospital	Gen	Church	14	6	6	200	614
Basin, 1,000—Big Horn							
Basin Hospital	Gen	Part	13	3	5	86	675
Wyoming State Sanatorium	TB	State	34	23	..	...	24
Casper, 17,564—Natrona							
Memorial Hospital of Natrona County[b]	Gen	County	144	108	24	780	4,611
Cheyenne, 17,474—Laramie							
Memorial Hospital of Laramie County[b]	Gen	County	122	115	25	1,092	4,817
Veterans Admin. Center[b]	Gen	Vet	201	141	..	...	2,301
Cody, 2,525—Park							
Cody Hospital	Gen	NPAssn	35	22	12	280	1,220
Douglas, 2,205—Converse							
Converse County Memorial Hospital	Gen	County	20	18	8	120	617
Evanston, 3,465—Uinta							
Wyoming State Hospital[b]	Ment	State	650	598	..	...	151
Fort Warren, 29—Laramie							
Station Hospital	Gen	Army	380	30	11	98	2,243
Fort Washakie, 135—Fremont							
Wind River Indian Hospital	Gen	IA	44	13	6	78	414
Gillette, 2,177—Campbell							
McHenry Hospital	Gen	Indiv	13	7	5	84	450
Greybull, 1,629—Big Horn							
St. Luke's Hospital	Gen	Part	13	5	5	87	702

WYOMING—Continued

Hospitals and Sanatoriums	Type of Service	Ownership or Control	Beds	Average Census	Bassinets	Number of Births	Admissions
Jackson, 1,046—Teton							
St. John's Hospital	Gen	Church	31	10	7	202	797
Kemmerer, 2,026—Lincoln							
Lincoln County Miners Hosp.	Gen	NPAssn	25	7	6	112	491
Lander, 2,304—Fremont							
Bishop Randall Hospital	Gen	Church	20	17	6	160	746
Laramie, 10,627—Albany							
Ivinson Memorial Hospital	Gen	County	70	49	17	455	3,703
Lovell, 2,175—Big Horn							
Lovell Hospital	Gen	Part	20	9	9	170	705
Lusk, 1,814—Niobrara							
Lusk Hospital	Gen	Indiv	16	6	9	57	284
Spencer Hospital	Gen	Indiv	23	13	8	90	1,115
Rock Springs, 9,827—Sweetwater							
Memorial Hospital of Sweetwater County[b]	Gen	County	120	...	20	Estab.	1948
Sheridan, 10,528—Sheridan							
Sheridan County Memorial Hospital	Gen	County	78	49	16	320	2,000
Veterans Admin. Hospital[b]	Ment	Vet	900	691	..	...	970
Wheatland, 2,136—Platte							
Wheatland General Hospital[b]	Gen	NPAssn	41	29	7	105	2,744
Worland, 2,710—Washakie							
Worland Hospital	Gen	Corp	19	12	8	140	640
Related Institutions							
Hanna, 1,127—Carbon							
Hanna Hospital	Gen	NPAssn	13	5	3	40	205
Lander, 2,304—Fremont							
Wyoming State Training School	MeDe	State	413	396	..	...	22
Sheridan, 10,528—Sheridan							
Reynolds Home	Gen	Indiv	11	9	10	140	200
Yellowstone Park, 200—Yellowstone National Park							
Mammoth Hospital	Gen	Part	50	9	3	12	322

ALASKA

Hospitals, Sanatoriums and Related Institutions	Type of Service	Ownership or Control	Beds	Average Census	Bassinets	Number of Births	Admissions
Anchorage, 3,495							
Providence Hospital	Gen	Church	73	50	20	431	3,411
Barrow, 362							
Point Barrow Hospital	GenTb	Fed	16	8	4	35	220
Bethel, 376							
Alaska Native Service Hosp.	Gen	IA	47	42	6	64	680
Cordova, 928							
Cordova Community Hosp.	Gen	NPAssn	23	10	4	30	497
Fairbanks, 3,455							
St. Joseph's Hospital	Gen	Church	54	45	10	220	1,625
Fort Yukon, 274							
Hudson Stuck Memorial Hospital[b]	Gen	Church	40	27	4	20	341
Juneau, 5,729							
Alaska Native Service Hosp.	GenTb	IA	20	20	5	47	400
St. Ann's Hospital	Gen	Church	55	35	9	300	1,227
Kanakanak, 133							
Alaska Native Service Hosp.	Gen	IA	32	20	6	15	270
Ketchikan, 4,005							
Ketchikan General Hospital	Gen	Church	75	50	17	220	1,067
Kodiak, 984							
Griffin Memorial Hospital	Gen	Church	19	9	6	160	570
U. S. Naval Air Station Dispensary	Gen	Navy	100	11	..	...	1,056
Kotzebue, 372							
Alaska Native Service Hosp.	Gen	IA	17	14	..	...	270
Nome, 1,539							
Maynard-Columbus Hospital	Gen	Church	21	7	4	50	625
Palmer, 150							
Matanuska Valley Hospital	Gen	NPAssn	12	...	4	...	...
Petersburg, 1,323							
Petersburg General Hospital	Gen	City	9	5	4	45	224
St. Paul Island (Unalaska P. O.), 200							
St. Paul Island Hospital	Gen	Fed	10	2	3	17	70
Seldovia, 410—Alaska							
Seldovia General Hospital	Gen	Church	8	2	3	20	147
Seward, 940							
Seward General Hospital	Gen	Church	20	16	4	164	687
Sitka, 1,967							
Pioneers' Home Hospital	Inst	Ter	50	...	..	...	...
Skagway, 634							
Pacific and Arctic Railway and Navigation Company Hosp.	Gen	NPAssn	10	...	2	28	...
Tanana, 170							
Tanana Hospital	Gen	IA	31	21	4	4	50
Valdez, 599							
Valdez Community Hospital	Gen	NPAssn	40	25	6	20	200
Wrangell, 1,102							
Bishop Rowe General Hosp.	Gen	Church	16	2	3	65	200

CANAL ZONE

Hospitals, Sanatoriums and Related Institutions	Type of Service	Ownership or Control	Beds	Average Census	Bassinets	Number of Births	Admissions
Ancon, 1,966							
Gorgas Hospital[a-b-c]	Gen	Fed	320	213	49	1,333	14,222
Balboa, 3,009							
Palo Seco Leper Colony	Lepro	Fed	140	113	..	...	3
Coco Solo, 50							
U. S. Naval Hospital	Gen	Navy	150	65	10	154	1,660

Key to symbols and abbreviations is on page 1295

CANAL ZONE—Continued

Hospitals, Sanatoriums and Related Institutions	Type of Service	Ownership or Control	Beds	Average Census †	Residents	Number of Births	Admissions †
Corozal, 1,370							
Corozal Hospital	Ment	Fed	467	321	..	....	168
Cristobal, 826							
Colon Margarita Hospital	Gen	Fed	450	188	25	558	7,152
Fort Clayton, 3,869							
Station Hospital	Gen	Army	350	225	15	350	5,256

GUAM

Hospitals, Sanatoriums and Related Institutions	Type of Service	Ownership or Control	Beds	Average Census †	Residents	Number of Births	Admissions †
Agana							
U. S. Naval Hospital*	Gen	Navy	500	350	18	93	7,274

HAWAII

Hospitals, Sanatoriums and Related Institutions	Type of Service	Ownership or Control	Beds	Average Census †	Residents	Number of Births	Admissions †
Aiea, 3,353—Honolulu							
U. S. Naval Hospital*	Gen	Navy	750	579	18	195	9,197
Ewa, 3,570—Honolulu							
Ewa Plantation Hospital	Gen	NPAssn	44	24	6	185	1,501
Haina,—Hawaii							
Honokaa Plantation Hospital	Gen	NPAssn	30	13	4	45	451
Hakalau, 325—Hawaii							
Hakalau Plantation Hospital	Gen	NPAssn	20	11	3	45	333
Hana, 250—Maui							
Hana County Hospital	Gen	County	25	8	4	35	293
Hilo, 23,351—Hawaii							
Hilo Memorial Hospital	Gen	County	183	117	22	522	3,600
Dr. E. Matayoshi Hospital	Gen	Indiv	42	9	5	42	422
Puumaile Hospital	TB	County	225	161	..	....	122
Honokaa, 1,609—Hawaii							
Okada Hospital	Gen	Indiv	6	3	3	52	167
Honolulu, 179,559—Honolulu							
Kalihi Hospital	Lepro	Ter	44	11	..	2	19
Kapiolani Maternity and Gynecological Hospital*	MatGyn	NPAssn	165	79	87	3,489	4,812
Kauikeolani Children's Hospital*†	Chil	NPAssn	122	77	..	....	4,424
Kuakini Hospital*	Gen	NPAssn	120	102	20	811	5,073
Leahi Hospital*†	TB	NPAssn	738	520	..	....	516
Queen's Hospital*†‡	Gen	NPAssn	340	307	44	1,981	12,278
St. Francis Hospital*†	Gen	Church	208	151	42	1,802	7,261
Shriners Hospital for Crippled Children*	Orth	NPAssn	28	27	..	....	198
Tripler General Hospital*†	Gen	Army	750	378	22	407	8,560
Hoolehua,—Maui							
Robert W. Shingle, Jr., Memorial Hospital	Gen	Church	32	23	6	95	1,007
Kahuku, 1,365—Honolulu							
Kahuku Hospital*	Gen	NPAssn	30	18	6	142	875
Kalaupapa,—Kalawao							
Kalaupapa Settlement	Lepro	Ter	340	288	2	1	35
Kaneohe, 125—Honolulu							
Territorial Hospital	Ment	Ter	1,150	1,103	..	....	347
Kapaa, 2,858—Kauai							
Samuel Mahelona Memorial Hospital	TB	County	110	85	..	....	55
Kealakekua, 250—Hawaii							
Kona Hospital	Gen	County	50	15	9	123	474
Kohala, 720—Hawaii							
Kohala County Hospital	Gen	County	50	15	6	101	883
Kula (Waiakoa P. O.),—Maui							
Kula General Hospital	Gen	County	20	7	6	22	369
Kula Sanatorium	TB	County	212	182	..	....	153
Lahaina, 5,717—Maui							
Pioneer Mill Company's Hosp.	Gen	NPAssn	65	42	9	135	1,248
Lanai City, 3,307—Maui							
Lanai City Hospital	Gen	NPAssn	23	7	6	79	528
Laupahoehoe, 430—Hawaii							
Laupahoehoe Sugar Company Plantation Hospital	Gen	NPAssn	28	13	4	34	560
Libue, 4,272—Kauai							
G. S. Wilcox Memorial Hosp.*	Gen	NPAssn	94	46	14	373	2,302
Maunaloa,—Maui							
Maunaloa Hospital	Gen	NPAssn	19	5	5	10	366
Olaa, 367—Hawaii							
Olaa Plantation Hospital	Gen	NPAssn	41	22	11	72	745
Ookala, 526—Hawaii							
Ookala Hospital	Gen	NPAssn	9	4	4	15	91
Paauilo, 1,203—Hawaii							
Hamakua Mill Company Hospital	Gen	NPAssn	11	6	2	21	253
Pahala, 290—Hawaii							
Hawaiian Agricultural Company Hospital*	Gen	NPAssn	37	20	6	96	822
Pala, 4,272—Maui							
Pala Hospital	Gen	NPAssn	78	42	10	225	1,924
Pearl City, 1,971—Honolulu							
Waimano Home	MeDe	Ter	650	612	..	....	618
Pepeekeo, 500—Hawaii							
Pepeekeo Plantation Hospital	Gen	NPAssn	41	20	4	90	793
Puunene, 4,456—Maui							
Puunene Hospital	Gen	NPAssn	95	60	16	222	2,007
Waialua, 2,532—Honolulu							
Waialua Agricultural Company, Ltd., Hospital	Gen	NPAssn	37	12	6	100	472
Wailuku, 7,319—Maui							
Maluhani Hospital	Gen	County	110	54	21	304	3,388

HAWAII—Continued

Hospitals, Sanatoriums and Related Institutions	Type of Service	Ownership or Control	Beds	Average Census †	Residents	Number of Births	Admissions †
Waimea, 2,091—Kauai							
Waimea Hospital*	Gen	NPAssn	35	28	7	206	1,276
Waipahu, 6,956—Honolulu							
Oahu Sugar Company Hosp.	Gen	NPAssn	52	32	6	118	1,332
Tamura Hospital	Gen	Indiv	7	3	3	124	175

PUERTO RICO

Hospitals, Sanatoriums and Related Institutions	Type of Service	Ownership or Control	Beds	Average Census †	Residents	Number of Births	Admissions †
Aguadilla, 13,465—Aguadilla							
Aguadilla Charity Dist. Hosp.	Gen	Govt	300	200	35	865	5,717
Aibonito, 4,183—Guayama							
Aibonito Tuberculosis Hosp.	TB	Govt	97	90	..	....	130
Arecibo, 22,132—Arecibo							
Charity District Hospital*	Gen	Govt	281	179	34	493	4,216
Clinica Dr. Susoni		Indiv	190	89	13	146	2,159
Bayamon, 14,356—San Juan							
Charity District Hospital*‡	Gen	Govt	300	200	35	1,574	6,621
Caguas, 24,378—Guayama							
Clinica San Rafael	Gen	Indiv	60	35	6	94	980
Castaner, 3,856—Aguadilla							
Castaner General Hospital	Gen	Church	29	23	6	145	1,022
Cayey, 5,622—Guayama							
Clinica Font	Gen	Indiv	50	38	..	....	557
Central Aguirre,—Guayama							
Central Aguirre Hospital	Gen	NPAssn	26	16	2	18	974
Fajardo, 7,188—Humacao							
Coomb's Hospital	Indus	NPAssn	25	12	..	....	497
Charity District Hospital*‡	Gen	Govt	300	197	24	816	4,655
Guayama, 16,936—Guayama							
Tuberculosis Hospital	TB	Govt	100	98	..	....	162
Hato Rey,—San Juan							
Clinica Dr. M. Julia*	N&M	Corp	325	312	..	....	932
Sanatorio de la Sociedad Espanola de Auxilio Mutuo y Beneficencia de Puerto Rico	Gen	NPAssn	150	90	15	334	2,139
Humacao, 7,624—Humacao							
Clinica Oriente	Gen	Indiv	77	58	4	32	1,333
Ryder Memorial Hospital	Gen	Church	52	41	8	314	1,329
Jayuya, 1,898—Ponce							
Catalina Figueras Memorial Hospital	Gen	City	12	10	..	65	1,008
Juana Diaz, 3,921—Ponce							
Municipal Hospital	Gen	City	42	....	5	....	....
Manati, 6,771—Arecibo							
Manati Municipal Hospital	Gen	City	50	....	8	....	....
Mayaguez, 30,371—Mayaguez							
Clinica Betances	Gen	Indiv	125	54	10	45	1,287
Clinica Drs. Perea	Gen	Part	130	95	12	460	3,244
Tuberculosis Hospital	TB	Govt	200	140	..	....	168
Ponce, 65,179—Ponce							
Clinica Quirurgica Dr. Pila*‡	Gen	NPAssn	220	184	27	161	3,552
Hospital Municipal Valentin Tricoche	Gen	City	180	....	..	....	....
Hospital Santo Asilo de Damas*‡	Gen	Church	130	122	20	267	4,627
St. Luke's Memorial Hosp.*	Gen	Church	90	72	12	187	2,128
Tuberculosis Hospital	TB	Govt	300	285	..	....	300
Rio Piedras, 19,933—San Juan							
Clinica Antillas	TB	Corp	75	44	..	....	287
Clinica Pereira Leal*	Gen	Indiv	140	80	15	322	2,465
Hospital for the Lepers	Lepro	Govt	80	52	..	....	64
Insular Hosp. of Psychiatry	Ment	Govt	1,000	1,250	..	....	478
Insular Tuberculosis Sanatorium*	TB	Govt	800	800	..	..	914
Salinas, 3,176—Guayama							
Salinas Municipal Hospital	Gen	City	50	26	6	200	1,922
San Juan, 169,255—San Juan							
Clinica Miramar Hospital	Gen	Indiv	160	30	5	1	912
Hospital Pavia*‡	Gen	Corp	75	54	20	710	1,721
Hospital San Jose	Gen	Corp	100	49	16	209	1,380
Ophthalmic Institute of Puerto Rico	Eye	Corp	60	51	..	....	2,275
Presbyterian Hospital*‡	Gen	Church	115	97	22	716	3,700
Rodriguez General Hospital*	Gen	Army	600	274	9	142	5,256
San Juan City Hospital*‡	Gen	City	417	358	82	4,217	14,813
U. S. Marine Hospital*	Gen	USPHS	50	76	..	....	1,324
University Hospital*†	Gen	Govt	54	41	2	....	859
Veterans Admin. Hospital	Gen	Vet	200	185	..	....	3,084
Santurce,—San Juan							
Hospital Mimiya	Gen	Indiv	100	69	15	28	911
Utuado, 4,459—Arecibo							
Clinica San Miguel	Gen	Indiv	92	51	3	....	1,424

VIRGIN ISLANDS

Hospitals, Sanatoriums and Related Institutions	Type of Service	Ownership or Control	Beds	Average Census †	Residents	Number of Births	Admissions †
Charlotte Amalie, 9,901—St. Thomas Island							
Municipal Hospital	Gen	CyCo	100	83	19	228	1,862
Christiansted, 4,495—St. Croix Island							
Christiansted Municipal Hosp.	Gen	City	74	47	8	132	1,324
St. Croix Hospital for Leprosy	Lepro	City	92	36	..	....	3
Frederiksted, 3,426—St. Croix Island							
Frederiksted Municipal Hosp.	Gen	City	61	36	10	133	1,190

Key to symbols and abbreviations is on page 1508

SCHOOLS FOR X-RAY TECHNICIANS

The American Registry of X-Ray Technicians, which is sponsored by the American College of Radiology, requested the American Medical Association to assume the responsibilities of approving schools for x-ray technicians. A resolution embodying this request was presented to the House of Delegates of the American Medical Association during the 1943 session. Action on the resolution delegated the Council on Medical Education and Hospitals to establish standards of training, inspect schools and publish lists of approved schools. With the advice of the Registry and the College, suitable standards were prepared and during the 1944 session were accepted by the House of Delegates.

Prior to this time approval was granted by the Registry. All the schools on the 1944 list published by the Registry were surveyed before the standards, or "Essentials" as they are referred to by the Council, were finally adopted. This information as well as that obtained from other schools which were anxious to be approved has been tabulated and made available to the Registry. The first list of schools approved by the Council was printed in THE JOURNAL on Jan. 13, 1945.

There are 211 schools presently approved, which is an increase for the year of 50 schools. Thirty-two states and the District of Columbia are represented.

Only a relatively small number of the schools have entrance requirements beyond high school graduation, 174 of the schools accepting high school graduates. Fifteen schools accept graduate nurses. There are 18 schools that require one year of college and 17 that require two years of college for entrance.

No tuition is required by 133 of the schools. Thirty-one schools have a tuition fee of less than $100, and 35 others have fees ranging from $100 to $200.

Of the 211 approved schools, 137 offer twelve months of training, the percentage being approximately that of the previous year. Twenty-one schools offer courses of eighteen months, but 46 schools require twenty-four months of training and experience for completion of their course.

Maximum enrolment is 948, an increase of 184. There were 499 graduates reported, which is 72 more than last year and only 17 less than the anticipated number. It is expected that 660 students will be graduated next year.

Correspondence regarding schools for x-ray technicians should be addressed to the Council on Medical Education and Hospitals. Graduates desiring registration should communicate with the American Registry of X-Ray Technicians, 2900 East Minnehaha Parkway, Minneapolis 6.

APPROVED SCHOOLS FOR X-RAY TECHNICIANS

Council on Medical Education and Hospitals of the American Medical Association

NOTE: Complete details regarding admission to an approved school for x-ray technicians can be obtained by communicating directly with the radiologist. Asterisk (*) after name of school indicates that male as well as female students are admitted.

Name and Location of School	Radiologist in Charge	Entrance Requirements	Length of Training in Months	Maximum Enrolment	Classes Begin	Tuition	Certificate, Diploma, Degree
ARIZONA							
St. Monica's Hospital, Phoenix *	J. Foster, M.D.	High school	12	2	Spring	None[a]	Certificate
ARKANSAS							
University Hospital, Little Rock *	I. Meschan, M.D.	High school	12	12	Feb.-July	$300	Certificate
CALIFORNIA							
Herrick Memorial Hospital, Berkeley *	W. A. Ward, M.D.	High school	24	4	Quarterly	$100	Certificate
California Hospital, Los Angeles *	W. Hiemstra, M.D.	High school	24	4	Varies	$ 50[a]	Diploma
Cedars of Lebanon Hospital, Los Angeles *	E. Friedman, M.D.	High school	12	..	Quarterly	None	Certificate
College of Medical Evangelists, Los Angeles *	W. Stilson, M.D.	1 yr. college	12	6	Every 2 mo.	$160	Diploma
Los Angeles County Hospital, Los Angeles *	R. A. Carter, M.D.	2 yrs. coll. or R.N.	12	8	Varies	None[a]	Certificate
Collis P. & Howard Huntington Mem. Hosp., Pasadena	R. S. Harrison, M.D.	2 yrs. college	12	3	Sept.	$ 25	Certificate
Mercy Hospital, Sacramento	J. D. Lawson, M.D.	High school	12	3	Jan.-July	None	Certificate
COLORADO							
Colorado General Hospital, Denver	E. A. Schmidt, M.D.	High school	12	8	Varies	None	Certificate
Denver General Hospital, Denver *	J. H. Weiss, M.D.	High school	12	6	Jan.-July	None	Certificate
Presbyterian Hospital, Denver *	K. D. A. Allen, M.D.	High school	12	2	Every 6 mo.	None	Degree
St. Anthony Hospital, Denver	J. S. Bousley, M.D.	1 yr. college	12	6	Jan.-June	None	Certificate
St. Luke's Hospital, Denver *	W. P. Stampfli, M.D.	High school	12	4	Quarterly	None	Cert. & Dipl.
Weld County Hospital, Greeley *	K. D. A. Allen, M.D.	1 yr. college	12	3	Every 6 mo.	None	Diploma
CONNECTICUT							
Grace Hospital, New Haven *	R. M. Lowman, M.D.	High school	18-24	6	Every 6 mo.	None	Certificate
The Hospital of St. Raphael, New Haven *	R. Shapiro, M.D.	High school	12	4	Jan.-July	None	Certificate
New Haven Community Hospital, New Haven *	A. H. Janzen, M.D.	1 yr. coll. or R.N.	24	6	Oct.-April	None	Certificate
GEORGIA							
Crawford W. Long Memorial Hospital, Atlanta *	W. F. Lake, M.D.	2 yrs. college	12	7	Jan.-July	None	Certificate
Georgia Baptist Hospital, Atlanta *	L. Long, M.D.	High school	19	3	Jan.-June	None	Cert. & Dipl.
Grady Memorial Hospital, Atlanta *	H. S. Weens, M.D.	High school	12	5	Quarterly	None	Certificate
Piedmont Hospital, Atlanta	G. R. Hrdlicka, M.D.	High school	12	2	Jan.-July	None	Certificate
University Hospital, Augusta *	L. P. Holmes, M.D.	High school	12	10	Varies	None	Certificate
Emory University Hospital, Emory, Univ.*	T. P. Leigh, M.D.	2 yrs. college	12	3	Every 4 mo.	$100	Certificate
IDAHO							
St. Alphonsus Hospital, Boise *	J. B. Morris, M.D.	High school	12	3	Fall & Spring	None[a]	Certificate
St. Luke's Hospital, Boise *	A. M. Popma, M.D.	1 yr. college	15	4	Fall & Spring	None	Certificate
ILLINOIS							
Alexian Brothers Hospital, Chicago *	M. Indovina, M.D.	High school	24	3	Jan.-June	None[a]	Certificate
Augustana Hospital, Chicago	D. S. Bellin, M.D.	1 yr. coll. or R.N.	18	2	Feb.-July	None[a]	Diploma
Chicago Memorial Hospital, Chicago	J. F. Sammet, M.D.	High school	12	2	Quarterly	None	Certificate
Cook County Graduate School of Medicine, Chicago *	G. M. Landau, M.D.	High school	12	6	Jan.-July	$150	Certificate
Edgewater Hospital, Chicago *	N. S. Zeitlin, M.D.	High school	12	10	Varies	$80	Certificate
Englewood Hospital, Chicago	B. C. Cushway, M.D.	High school	18	2	Every 6 mo.	None	Certificate
Evangelical Hospital, Chicago	B. C. Cushway, M.D.	1 yr. coll. or R.N.	18	3	Oct.-Apr.	None[a]	Certificate
Michael Reese Hospital, Chicago	R. A. Arens, M.D.	1 yr. college	18	6	Varies	$ 25[a]	Certificate
Mount Sinai Hospital, Chicago	J. Arendt, M.D.	High school	12	6	Every 6 mo.	None	Certificate
Norwegian-American Hospital, Chicago *	R. H. Warden, M.D.	High school	24	4	Varies	$150	Certificate
Provident Hospital, Chicago *	W. P. Quinn, M.D.	High school	12	6	Quarterly	$150	Certificate

APPROVED SCHOOLS FOR X-RAY TECHNICIANS—Continued

Name and Location of School	Radiologist in Charge	Entrance Requirements	Length of Training in Months	Maximum Enrollment	Classes Begin	Tuition	Certificate, Diploma, Degree
Ravenswood Hospital, Chicago	D. L. Jenkinson, M.D.	High school	18	3	Varies	$ 50	Diploma
St. Bernard's Hospital, Chicago	B. C. Cushway, M.D.	1 yr. coll. or R.N.	18	5	Apr Oct	None*	Certificate
St. Elizabeth's Hospital, Chicago *	J. Brams, M.D.	High school	12	2	Varies	None*	Certificate
St. George's Hospital, Chicago	B. C. Cushway, M.D.	1 yr. coll. or R.N.	18	5	Oct Apr	None*	Certificate
St. Joseph's Hospital, Chicago *	W. E. Anspach, M.D.	High school	12	2	Fe. Sept	$100*	Certificate
St. Luke's Hospital, Chicago	F. L. Jenkinson, M.D.	2 yrs. coll. or R.N.	18	13	Varies	$ 50	Diploma
St. Mary of Nazareth Hospital, Chicago *	C. J. Challenger, M.D.	High school	24	3	Varies	$ 35*	Diploma
South Chicago Community Hospital, Chicago *	B. D. Braun, M.D.	High school	18	6	Varies	None*	Diploma
Woodlawn Hospital, Chicago	H. A. Olin, M.D.	High school	18	3	Varies	None*	Certificate
Dixon Public Hospital, Dixon *	R. E. Kinzer, M.D.	High school	12	2	Varies	None*	Diploma
St. Francis Hospital, Evanston *	A. C. Ledoux, M.D.	High school	12	4	Jan July	$ 50*	Certificate
John C. Proctor Hospital, Peoria *	P. B. Goodwin, M.D.	High school	12	4	Every 6 mo.	$100	Certificate
Methodist Hospital of Central Illinois, Peoria *	F. H. Decker, M.D.	1 yr. coll. or R.N.	12	2	Varies	None	.....
St. Francis Hospital, Peoria *	P. R. Dirkse, M.D.	High school	24	3	Fe Sept	$100	Certificate
St. Anthony's Hospital, Rockford	T. J. Lang, M.D.	High school	18	4	Fall	$ 25	Diploma
Swedish-American Hospital, Rockford	H. W. Ackermann, M.D.	High school	18	2	Jan July	None	Certificate
Memorial Hospital, Springfield *	J. E. King, M.D.	High school	12	3	Jan July	None	Certificate
St. John's Hospital, Springfield	W. DeHollander, M.D.	High school	12	6	Sept	$ 50	Certificate
Victory Memorial Hospital, Waukegan *	E. W. Spackman, M.D.	High school	18	2	Varies	None*	Diploma
INDIANA							
St. Catherine's Hospital, East Chicago	B. D. Braun, M.D.	High school	18	8	Quarterly	$100	Diploma
Methodist Hospital, Gary *	J. P. Bennett, M.D.	High school	12	2	Jan July	None*	Diploma
Indiana University Medical Center, Indianapolis *	J. A. Campbell, M.D.	High school	12-18	4	July	None	Certificate
Methodist Hospital, Indianapolis *	H. C. Ochsner, M.D.	High school	12	6	Varies	None*	Diploma
St. Anthony's Hospital, Terre Haute *	H. J. Pierce, M.D.	2 yrs. coll. or R.N.	12	3	Every 6 mo.	$ 50	Certificate
IOWA							
Mercy Hospital, Cedar Rapids *	A. W. Erskine, M.D.	1 yr. college	16	4	July	None*	Certificate
St. Luke's Methodist Hospital, Cedar Rapids *	J. V. Prouty, M.D.	High school	12	1	Varies	None*	Certificate
Finley Hospital, Dubuque *	R. P. Rusk, M.D.	High school	24	3	Every 6 mo.	$300	Certificate
St. Joseph Mercy Hospital, Dubuque *	R. P. Rusk, M.D.	High school	24	3	Every 6 mo.	$300	Certificate
University Hospitals, Iowa City *	H. D. Kerr, M.D.	High school	12	8	Every 6 wks.	None	Certificate
St. Joseph Mercy Hospital, Sioux City *	H. M. McClintock, M.D.	High school	24	2	Fe Sept	None	Diploma
KANSAS							
Bethany Hospital, Kansas City	L. G. Allen, M.D.	High school	12	2	Mar Sept	None*	Certificate
University of Kansas School of Medicine, Kansas City *	G. M. Tice, M.D.	3 yrs. college	12	5	Varies	None*	Certificate
Wesley Hospital, Wichita	N. C. Nash, M.D.	2 yrs. college	12	2	Sept	None*	Certificate
KENTUCKY							
Louisville General Hospital, Louisville	E. L. Pirkey, M.D.	High school	12	4	Varies	$ 50	Certificate
St. Joseph Infirmary, Louisville *	S. E. Johnson, M.D.	High school	24	4	Feb Sept	None*	Certificate
LOUISIANA							
Charity Hospital, New Orleans *	L. J. Menville, M.D.	High school	12	25	Aug	None	Cert. & Dipl.
United States Marine Hospital, New Orleans *	A. Mayoral, M.D.	High school	12	2	Jan July	None*	Certificate
Shreveport Charity Hospital, Shreveport *	G. M. Riley, M.D.	1 yr. coll. or R.N.	18	6	Varies	None	Certificate
MARYLAND							
Baltimore City Hospitals, Baltimore *	S. H. Macht, M.D.	High school	24	6	Varies	None*	Cert. & Dipl.
Johns Hopkins Hospital, Baltimore *	R. H. Morgan, M.D.	High school	12	15	Mar Sept	$100	Certificate
MASSACHUSETTS							
Lahey Clinic, Boston *	H. I. Hare, M.D.	High school	12	6	Jan June	None	.....
Massachusetts Memorial Hospitals, Boston	G. Levene, M.D.	High school	12	3	Varies	None	Certificate
Providence Hospital, Holyoke	E. J. Harrington, M.D.	High school	15	2	Spring & Fall	None	Certificate
Lawrence General Hospital, Lawrence *	J. E. Miller, M.D.	High school	12	4	Jan Sept	$125	Certificate
St. Luke's Hospital, Pittsfield	W. G. Gross, M.D.	High school	12	3	Quarterly	None	Diploma
Mercy Hospital, Springfield	J. W. Turner, M.D.	High school	12	3	Every 6 mo.	None	Certificate
St. Vincent's Hospital, Worcester	A. E. O'Connell, M.D.	High school	12	3	Jan Sept	None	Certificate
MICHIGAN							
St. Joseph Mercy Hospital, Ann Arbor	S. W. Donaldson, M.D.	High school	12	3	July	$125	Certificate
Leila Y. Post Montgomery Hospital, Battle Creek *	S. P. Barden, M.D.	High school	12	2	Jan June	None	Diploma
Mt. Carmel Mercy Hospital, Detroit	J. M. Grace, M.D.	High school *	12	6	Sept	$150	Cert., Dipl. & Deg.
St. Mary's Hospital, Detroit *	J. E. Lofstrom, M.D.	High school	12	10	Mar Sept	$125	Certificate
Hurley Hospital, Flint *	D. M. Limbach	High school	12	6	Jan July	None	Certificate
Blodgett Memorial Hospital, Grand Rapids *	H. C. Severs, M.D.	High school	12	2	Varies	None	Certificate
St. Joseph Mercy Hospital, Pontiac *	J. A. Morton, M.D.	High school	12	2	Mar Sept	None*	Certificate
MINNESOTA							
St. Luke's Hospital, Duluth *	A. L. Abraham, M.D.	High school	18	6	Every 3 mo.	None	Cert. & B.S.
St. Mary's Hospital, Duluth	J. R. McNutt, M.D.	2 yrs. coll. or R.N.	12	6	Sept Mar	None	Diploma
Mt. Sinai Hospital, Minneapolis	B. H. Berenberger, M.D.	High school	12	2	Jan July	None*	Certificate
Minneapolis General Hospital, Minneapolis	O. Lipschultz, M.D.	High school	12	15	Varies	None	Diploma
St. Mary's Hospital, Minneapolis	W. Ude, M.D.	High school	12	6	Oct Apr	None	Certificate
Swedish Hospital, Minneapolis *	G. T. Nordin, M.D.	2 yrs. college	12	10	Every 2 mo.	$125*	Cert. & B.S.
University of Minnesota Hospitals, Minneapolis	L. G. Rieger, M.D.	2 yrs. coll. or R.N.	15	10	Varies	$ 47	Certificate
Dept. Chest Diseases, St. Paul	C. F. Wood, M.D.	High school	24	2	Sept	None	Certificate
Bethesda Hospital, St. Paul *	J. P. Medelman, M.D.	High school	12	4	Varies	None	Certificate
Charles T. Miller Hospital, St. Paul *	H. O. Peterson, M.D.	High school	12	2	Varies	None	Certificate
St. Joseph's Hospital, St. Paul *	J. P. Medelman, M.D.	High school	12	2	Fall	None	.....
MISSISSIPPI							
Mercy Hospital-Street Memorial, Vicksburg *	T. B. Dominick, M.D.	High school	12	3	Varies	None	Certificate
MISSOURI							
Independence Sanitarium and Hospital, Independence *	J. F. Bowser, M.D.	High school	12	2	Jan July	None*	Certificate
Kansas City General Hospital, Kansas City	L. Scarpellino, M.D.	High school	12	6	Every 4 mo.	None	Certificate
Kansas City General Hospital No. 2, Kansas City *	I. H. Lockwood, M.D.	High school	12	4	Every 6 mo.	None	Certificate
Menorah Hospital, Kansas City	D. S. Dann, M.D.	High school	12	4	Quarterly	None*	Certificate
Research Hospital, Kansas City	I. H. Lockwood, M.D.	High school	12	6	Jan July	None	Certificate
St. Luke's Hospital, Kansas City	L. Scarpellino, M.D.	High school	12	4	Quarterly	$ 25	Certificate
De Paul Hospital, St. Louis *	E. C. Ernst, M.D.	High school	12	4	Jan July	$150	Certificate
Evangelical Deaconess Hospital, St. Louis	J. C. Peden, M.D.	High school	24	4	[illegible]	None*	Certificate
Homer G. Phillips Hospital, St. Louis *	W. E. Allen Jr., M.D.	High sch. or R.N.	24	6	Sept	$ 15	Certificate
St. Louis University School of Nursing, St. Louis *	L. R. Sante, M.D.	High school	4 yrs.	..	Each semester	$150 per sem.	Dipl. & Deg.
St. Mary's Infirmary, St. Louis	W. E. Allen Jr., M.D.	High school	24	2	Sept	$150	Certificate
NEBRASKA							
Lincoln General Hospital, Lincoln	J. M. Neely, M.D.	High school	12	2	Mar Sept	None	Certificate
St. Elizabeth's Hospital, Lincoln *	J. M. Neely, M.D.	High school	24	2	June	$100*	Cert. & Dipl.
Creighton Memorial St. Joseph's Hospital, Omaha *	J. F. Kelly, M.D.	2 yrs. college	24	4	Sept	$100	Certific. to
Immanuel Deaconess Institute, Omaha	F. L. Simonds, M.D.	1 yr. college	12	4	Sept Jan	$175	Diploma
University of Nebraska College of Medicine, Omaha	H. B. Hunt, M.D.	High school	12	3	Jan July	$ 75	Diploma

APPROVED SCHOOLS FOR X-RAY TECHNICIANS—Continued

Name and Location of School	Radiologist in Charge	Entrance Requirements	Length of Training in Months	Maximum Enrollment	Classes Begin	Tuition	Certificate, Diploma, Degree
NEW HAMPSHIRE							
Mary Hitchcock Memorial Hospital, Hanover	L. K. Sycamore, M.D.	2 yrs. coll. or R.N.	12	2	JanJuly	$ 30	Certificate
Laconia Hospital, Laconia *	A. Oppenheimer, M.D.	1 yr. coll. or R.N.	12	6	MayOct	$ 75	Certificate
NEW JERSEY							
Jersey City Medical Center, Jersey City *	H. J. Perlberg, M.D.	High school	12	10	FebAug	None	Certificate
Paterson General Hospital, Paterson *	F. L. Warren, M.D.	High school	12	5	SeptMar	None	Diploma
The Mercer Hospital, Trenton	M. P. Mains, M.D.	High school	12	2	June	None	Certificate
NEW YORK							
Albany Hospital, Albany *	W. P. Howard, M.D.	High school	24	7	Sept	$350	Certificate
Edward J. Meyer Memorial Hospital, Buffalo *	E. G. Fechner, M.D.	High school	24	4	July	None	Certificate
Brooks Memorial Hospital, Dunkirk *	S. B. Clark, M.D.	High school	24	2	JanJuly	None	Certificate
New York Hospital, New York *	H. Temple, M.D.	High school	18	20	Sept	$700	Diploma
New York Polyclinic Med. School and Hosp., New York *	E. E. Smith, M.D.	High school	12	20	Oct	$350	Certificate
St. Clare's Hospital, New York City	D. G. Butera, M.D.	High school	12	2	Sept	None	Certificate
Rochester General Hospital, Rochester *	E. F. Merrill, M.D.	High school	12	4	SeptFeb	$120	Certificate
Strong Memorial Hospital, Rochester *	G. H. Ramsey, M.D.	High school	12	4	Every 3 mo.	$100	Certificate
NORTH CAROLINA							
Duke University School of Medicine, Durham *	R. J. Reeves, M.D.	Coll. Dipl. or R.N.	12	4	MarOct	$ 25	Certificate
Watts Hospital, Durham *	W. W. Vaughan, M.D.	High school	12	2	JanJuly	None	Certificate
Bowman Gray School of Medicine, Winston-Salem	J. P. Rousseau, M.D.	High school	12	4	JanJuly	$ 50	Certificate
City Memorial Hospital, Winston-Salem *	J. Selman, M.D.	High school	12	2	JanJuly	None	Certificate
NORTH DAKOTA							
St. Alexius Hospital, Bismarck *	H. M. Berg, M.D.	High school	24	2	Varies	None	Certificate
Quain and Ramstead Clinic, Bismarck *	H. M. Berg, M.D.	High school	24	4	Varies	None	Certificate
Trinity Hospital, Minot	W. W. Wall, M.D.	2 yrs. college	12	2	AprSept	None	.....
OHIO							
City Hospital, Akron *	F. T. Moore, M.D.	High school	24	4	FebJuly	None	Cert. & Dipl.
Cincinnati General Hospital, Cincinnati *	R. Peirson, M.D.	High school	12	5	Quarterly	$ 50	Certificate
City Hospital, Cleveland *	H. Hauser, M.D.	High school	12	6	Every 6 wks.	$100	Certificate
Mount Sinai Hospital, Cleveland	H. A. Mahrer, M.D.	High school	12	4	Quarterly	$100	Certificate
St. Luke's Hospital, Cleveland *	D. D. Brannan, M.D.	High school	12	4	Quarterly	$ 50	Diploma
St. Vincent Charity Hospital, Cleveland *	E. J. O'Malley, M.D.	High school	12	2	Varies	$100	Certificate
University Hospitals, Cleveland *	H. L. Friedell, M.D.	High school	12	6	Every 6 wks.	$100	Certificate
Starling-Loving University Hospital, Columbus *	H. J. Means, M.D.	High school	12	4	Varies	None	Certificate
Good Samaritan Hospital, Dayton	H. Snow, M.D.	High school	24	2	Every 6 mo.	$ 50	Certificate
Miami Valley Hospital, Dayton *	G. A. Nicoll, M.D.	High school	12	4	Quarterly	None	Cert. & Deg.
St. Elizabeth's Hospital, Dayton *	H. Snow, M.D.	High school	12	2	JanJune	$ 50	Cert. & Deg.
Huron Road Hospital, East Cleveland *	J. O. Newton, M.D.	High school	12	4	Quarterly	$100	Certificate
St. Rita's Hospital, Lima *	D. W. English, M.D.	High school	18	3	JanJuly	None	Certificate
St. Joseph's Hospital, Lorain *	D. A. Russell, M.D.	High school	12	3	Jan	$ 50	Certificate
Youngstown Hospital, Youngstown	E. C. Baker, M.D.	High school	12	5	Varies	None	Certificate
OKLAHOMA							
St. Anthony's Hospital, Oklahoma City	J. E. Heatley, M.D.	High school	12	3	Spring & Fall	None	Certificate
University Hospitals, Oklahoma City *	J. E. Heatley, M.D.	High school	12	3	June	None	Certificate
St. John's Hospital, Tulsa	L. M. Psaroudi, M.D.	High school	24	6	June	None	Certificate
OREGON							
University of Oregon Medical School, Portland *	W. Y. Burton, M.D.	High school	12	6	Varies	None	Certificate
PENNSYLVANIA							
Chester Hospital, Chester	A. M. Sharpe, M.D.	High school	12	2	Varies	None	Certificate
Geo. F. Geisinger Memorial Hospital, Danville *	C. L. Hinkel, M.D.	High school	24	4	July	None	Certificate
Fitzgerald-Mercy Hospital, Darby	F. K. Alexander, M.D.	High school	12	5	JanJuly	None	Certificate
St. Vincent's Hospital, Erie *	R. D. Bacon, M.D.	High school	24	1	Varies	None	.....
Conemaugh Valley Memorial Hospital, Johnstown *	C. R. Cobern, M.D.	R.N.	..	3	Varies	....	.....
Grad. Hosp. of the Univ. of Penn., Philadelphia *	F. Finkelstein, M.D.	High school	24	12	OctJune	$150	Certificate
Hahnemann Hospital, Philadelphia	J. W. Frank, M.D.	High school	14	9	Quarterly	$150	Diploma
Hospital of the Univ. of Pennsylvania, Philadelphia *	F. P. Prendergrass, M.D.	High school	24	..	Sept	$350	Certificate
Jefferson Medical College Hospital, Philadelphia *	P. C. Sussman, M.D.	High school	24	8	Varies	None	.....
Jewish Hospital, Philadelphia	L. Solis-Cohen, M.D.	High school	15	10	Monthly	$400	Diploma
Nazareth Hospital, Philadelphia	J. S. Fetter, M.D.	High school	24	2	Sept	None	Certificate
Philadelphia General Hospital, Philadelphia	R. P. Widmann, M.D.	High school	18	20	MarSept	None	Diploma
Western Pennsylvania Hospital, Pittsburgh *	R. G. Alley, M.D.	High school	12	8	MarSept	None	Certificate
Chester County Hospital, West Chester *	J. G. Cohen, M.D.	High school	24	4	Sept	None	Certificate
Wilkes-Barre General Hospital, Wilkes-Barre *	P. E. Ringawa, M.D.	High school	12	4	Every 6 mo.	None	Certificate
SOUTH CAROLINA							
Roper Hospital, Charleston *	H. Rudisill Jr., M.D.	2 yrs. coll. or R.N.	12	8	MarSept	$180	Cert. & Dipl.
The Tri-County Hospital, Orangeburg *	A. Z. Willis, M.D.	High school	12	2	Feb	None	Certificate
Tuomey Hospital, Sumter *	M. E. Parrish, M.D.	High school	12	2	Varies	$ 50	Cert. & Dipl.
SOUTH DAKOTA							
McKennan Hospital, Sioux Falls *	N. J. Nessa, M.D.	High school	24	2	SeptMar	None	Diploma
Sioux Valley Hospital, Sioux Falls *	D. H. Brett, M.D.	High school	12	3	Varies	None	Certificate
Sacred Heart Hospital, Yankton	D. J. Tschetter, M.D.	2 yrs. coll. or R.N.	12	3	FebAug	$ 80	Cert. & Dipl.
TENNESSEE							
Knoxville General Hospital, Knoxville	H. H. McCampbell, M.D.	High school	12	3	Every 4 mo.	None	Certificate
University of Tennessee College of Medicine, Memphis *	D. S. Carroll, M.D.	High school	12	2	Quarterly	$ 80	Certificate
Meharry Medical College, Nashville *	L. D. Scott, M.D.	2 yrs. coll. or R.N.	24	2	Sept	$ 75	Certificate
TEXAS							
Hotel Dieu Hospital, Beaumont	L. H. Ledbetter, M.D.	1 yr. coll. or R.N.	12	..	JuneSept	None	Certificate
Baylor University Hospital, Dallas	F. M. Windrow, M.D.	2 yrs. college	12	3	JanJuly	$100	Certificate
Methodist Hospital, Dallas *	M. L. Mazy, M.D.	High school	12	2	July	None	Certificate
Parkland Hospital, Dallas *	J. E. Miller, M.D.	High school	18	6	Varies	None	Certificate
St. Paul's Hospital, Dallas *	O. D. Carlson, M.D.	High school	24	6	Quarterly	None	Certificate
University of Texas School of Medicine, Galveston *	M. Schneider, M.D.	1 yr. college	12	6	Every 6 mo.	$115	Certificate
Methodist Hospital, Houston *	C. H. Burge, M.D.	High school	24	1	July	None	Certificate
St. Joseph's Infirmary, Houston *	P. E. Wigby, M.D.	High school	24	6	Every 6 mo.	None	Certificate
Santa Rosa Hospital, San Antonio	M. Davis, M.D.	High school	24	4	SeptJune	$ 10	Certificate
Scott and White Clinic, Temple *	C. A. Stevenson, M.D.	High school	24	3	Varies	None	Certificate
UTAH							
Salt Lake County General Hospital, Salt Lake City *	M. H. Lerner, M.D.	High school	12	4	June	None	Certificate
VERMONT							
Mary Fletcher Hospital, Burlington *	A. B. Soule Jr., M.D.	High school	12	3	Every 4 mo.	$100	Certificate
VIRGINIA							
University of Virginia Hospital, Charlottesville *	V. W. Archer, M.D.	High school	12	6	JanJuly	None	Certificate
Medical College of Virginia Hosp. Division, Richmond	F. B. Mandeville, M.D.	High school	12	15	Every 4 mo.	None	Certificate
St. Luke's Hospital, Richmond	J. L. Tabb, M.D.	High school	12	2	JanJune	None	Certificate

APPROVED SCHOOLS FOR X-RAY TECHNICIANS—Continued

Name and Location of School	Radiologist in Charge	Entrance Requirements	Length of Training in Months	Maximum Enrolment	Classes Begin	Tuition	Certificate, Diploma, Degree
WEST VIRGINIA							
St. Luke's Hospital, Bluefield *	D. V. Kechele, M.D.	High school	12	2	Jan.-June	None	Certificate
Kanawha Valley Hospital, Charleston	W. P. Elkin, M.D.	High school	12	1	Summer	None	Certificate
McMillan Hospital, Charleston *	W. P. Elkin, M.D.	High school	12	1	June	None	Certificate
St. Francis Hospital, Charleston	W. P. Elkin, M.D.	High school	12	1	Nov	None	Diploma
WISCONSIN							
St. Francis Hospital, LaCrosse	P. V. Hulick, M.D.	High school	12	2	Sept	$ 50	Certificate
Madison General Hospital, Madison *	L. V. Littig, M.D.	High school	12	4	Every 4 mo.	None[c]	Certificate
St. Mary's Hospital, Madison	C. F. Sherman, M.D.	High school	24	4	Sept	None	Certificate
University of Wisconsin Medical School, Madison *	E. A. Poole, M.D.	1 yr. college	12	16	Every 6 wks.	$ 10	Certificate
Columbia Hospital, Milwaukee *	A. A. Morton, M.D.	High school	24	4	Varies	None[c]	Certificate
Evangelical Deaconess Hospital, Milwaukee *	A. Melamed, M.D.	High school	12	4	Quarterly	$100	Diploma
Milwaukee Hospital, Milwaukee	H. W. Hefke, M.D.	High school	24	5	Quarterly	None[c]	Certificate
Mount Sinai Hospital, Milwaukee *	M. Moel, M.D.	2 yrs. coll. or R.N.	12	4	Every 4 mo.	$100	Certificate
St. Joseph's Hospital, Milwaukee *	A. R. Altenhofen, M.D.	High school	24	14	Varies	$ 35	Certificate
St. Michael's Hospital, Stevens Point *	J. A. Knights, M.D.	High school	12	2	April	None	Certificate
St. Mary's Hospital, Wausau *	J. M. Foerster, M.D.	High school	24	4	Aug.-Mar	None	Diploma

a. Three years of college academic work required for degree.
b. Tuition refunded at end of course.
c. Students are paid a stipend.
d. Degree given to University of Dayton affiliates.

SCHOOLS FOR MEDICAL RECORD LIBRARIANS

The American Association of Medical Record Librarians presented a formal resolution to the 1942 session of the House of Delegates of the American Medical Association requesting the latter to assume the responsibilities of approving schools for medical record librarians. Action on the resolution granted the Council on Medical Education and Hospitals authority to establish standards, inspect training programs and publish lists of approved schools. Minimum essentials were formulated with the assistance of the American Association of Medical Record Librarians after all existing schools were inspected. These essentials were officially accepted by the House of Delegates in 1943. The first list of approved schools was published in June 1943. Currently there are 12 schools on the approved list. One new approved school is included.

There were 63 students who completed the prescribed course during 1947. In addition, 10 students completed a special or short course which is given for experienced but untrained medical record librarians. Three schools offer these short courses with a reported enrolment of 12 students. This year's reports indicate a current enrolment of 59 students in the regular course and an anticipated graduation of 59 students. Two schools anticipate no graduates in 1948.

A satisfactory proficiency in shorthand and typewriting is a prerequisite for entrance to all schools. Nine schools require two or more years of college and seven of these admit graduate nurses. Three schools provide four year courses admitting high school graduates which lead to a degree. The Educational Board of the American Association of Medical Record Librarians has authority to review applications of persons who lack the college credits required by a school but have experience in the medical or business world. If the applicant's background of experience is satisfactory, the Educational Board can notify the school that the student is acceptable. These students, unfortunately, are not eligible for scholarships.

The length of the hospital training which includes the didactic instruction is twelve months. Tuition varies between $125 and $300, with an average of $170 and a mean of $150. The courses are arranged to issue a certificate or diploma after completion of the twelve month course, while 1 hospital and all university courses have facilities to offer a degree.

The demand for adequately trained medical record librarians continues. Although the very considerable increase in the number of graduates this year over the 25 graduates of 1946 is gratifying, the fact remains that the present schools are not providing sufficient trained personnel to meet the needs of the hospitals. The scholarships that have been made available by the

APPROVED SCHOOLS FOR MEDICAL RECORD LIBRARIANS

Council on Medical Education and Hospitals of the American Medical Association

Name and Location of School	College Affiliation	Length of Course	Classes Start	Entrance Requirements*	Tuition	Certificate, Diploma, Degree	Maximum Enrolment
Samuel Merritt Hospital, Oakland, Calif.	None	12 mos.	Mar.-Aug.	2 yrs. coll. or R.N.	$150	Certificate	5
Univ. of Colorado School of Med. & Hosp., Denver	University of Colorado	12 mos.	Sept.	3 yrs. coll. or R.N.	$264	Degree	8
Grant Hospital, Chicago	None	12 mos.	Feb.-Sept.	2 yrs. coll. or R.N.	$150	Certificate	8
St. Joseph Hospital, Chicago	De Paul University	12 mos.	Mar.	2 yrs. coll. or R.N.	$150	Certificate	6
Wesley Memorial Hospital, Chicago	Northwestern University	12 mos.	Sept.	2 yrs. coll. or R.N.	$275	Certificate	12
Massachusetts General Hospital, Boston	Harvard Medical School	12 mos.	Sept.	2 yrs. coll. or R.N.	$195	Certificate	8
Mercy College, Detroit	Mercy College	12 mos.	Sept.	High school	$150	Dipl. & Deg.	10
College of St. Scholastica, Duluth, Minn.	†		Sept.	High school	$150 yr.	Degree	10
St. Louis University, St. Louis	St. Louis University	4 yrs.	Jan.-Sept.	High school	$300 yr.	Degree	16
Rochester General Hospital, Rochester, N. Y.	None	1 yr.	Feb.-Sept.	2 yrs. coll. or R.N.	$150 yr.	Certificate	10
Duke Hospital, Durham, N. C.	Duke University	12 mos.	June-Oct.	Degree	$175	Certificate	12
Graduate Hosp. of the Univ. of Penn., Philadelphia	University of Pennsylvania	12 mos.	Sept.	2 yrs. coll. or R.N.	$300	Certificate	16

* All students are required to be proficient in typing and shorthand. † Four academic years and one summer session.

National Foundation for Infantile Paralysis are doubtless of much help in increasing the enrolment. The inservice training programs provided through funds given by the Foundation together with the institutes sponsored by the American Hospital Association in cooperation with the American Association for Medical Record Librarians have been of valuable assistance.

Correspondence regarding registration should be addressed to the American Association of Medical Record Librarians, 18 East Division Street, Chicago 10.

SCHOOLS FOR OCCUPATIONAL THERAPY TECHNICIANS

At the 1933 sessions of the House of Delegates of the American Medical Association a resolution was introduced that some plans be effected for the establishment of standards, ratings and inspections of training schools for occupational therapy technicians. This program was referred to the Council on Medical Education and Hospitals, and all of the 13 existing schools were surveyed. The Essentials of an Acceptable School of Occupational Therapy were ratified by the House of Delegates of the American Medical Association at the Atlantic City session in 1935, such standards to become effective on Jan. 1, 1939. A report of the Council on Medical Education and Hospitals to the House of Delegates in 1936 contained the names of 4 schools which had already met these standards. There are currently 25 schools on the approved list, 7 new schools having been approved.

The 25 approved schools offer 36 curriculums, and 3 schools offer advanced courses. Entrance requirements vary according to the curriculum. Eighteen are designed for high school graduates who, it is expected, will devote four or five academic years to complete the combined college and professional subjects. Eight of the curriculums require one year of college as a prerequisite, while 2 prescribe two years of college credits and 7 require a degree.

There is a correlation between the length of training and entrance requirements among the various curriculums. Those that require a college degree usually enable the student to complete all work in two years, but 1 school presents three academic years of subjects in the course designed for college graduates.

All the approved schools are affiliated with recognized colleges, and 32 of the curriculums enable the student to acquire college credit. The amount of college credits available vary from about one semester in some of the shorter courses to 128 semester hours. Thus, degrees are granted by 23 schools and a diploma or certificate is presented by the other 2 schools. The curriculums which are shorter than the basic course are designed for a certificate or diploma when the student completes all requirements.

Tuition ranges between $21 and $600 per year. These amounts are, of course, determined by university fees, and there is no instance in which a certificate course fee exceeds the fee for a degree course. The fees for 10 courses have been increased by amounts varying from $25 to $125.

A total of 320 graduates have been reported by 19 schools with 74 students reported as having completed advanced courses at 10 schools. An equal number is anticipated to graduate from approved schools in 1948.

APPROVED SCHOOLS FOR OCCUPATIONAL THERAPY TECHNICIANS

Council on Medical Education and Hospitals of the American Medical Association

NOTE: The duration of the course is expressed in academic years.

Name and Location of School	College Affiliation	Duration of Course	Classes Start	Entrance Requirements	Tuition per Year	Certificate, Diploma, Degree	Graduates in 1947
University of Southern California, 3518½ 37th Place, Los Angeles	University of Southern California	2 yrs.	Feb Sept	Degree	$420	Certificate	22
		5 yrs.	Feb Sept	High sch.	$450	Cert. & B.S.	
Mills College, Oakland, Calif.	Mills College	3 yrs.	Feb Sept	Degree	$300	Certificate	..
					$350		
San Jose State College, San Jose, Calif.	San Jose State College	1½ yrs.	Varies	Degree	$ 21	Certificate	10
		3¼ yrs.	Varies	High sch.	$ 21	Degree	
University of Illinois College of Medicine, 1853 W. Polk St., Chicago	University of Illinois	5 yrs.	Feb	High sch.	$132	B.S.	14
University of Iowa, Iowa City, Iowa	State University of Iowa, College of Medicine	5 yrs.	.....	High sch.	$ 85	Cert. & Deg.	
University of Kansas, Lawrence	University of Kansas	2 yrs.	Feb Sept	Degree	$131	Certificate	10
		4 yrs.	Feb Sept	High sch.	$131	B.S.	
Boston School of Occupational Therapy, 7 Harcourt St., Boston	Tufts College	2 yrs.	Sept	Degree	$300	Diploma	13
Wayne University, 4841 Cass, Detroit, Mich.	Wayne University, College of Med., Coll. of Liberal Arts, Coll. of Education	5 yrs.	Sept	High sch.	$420	B.S.	
Kalamazoo School of Occupational Therapy, Western Michigan College of Education, Kalamazoo	Western Michigan College of Education	1¼ yrs.	Feb Sept	Degree	$127	Diploma	20
		4 yrs.	Feb Sept	1 yr. coll.	$127	Degree	
Michigan State Normal College, Ypsilanti	University of Michigan	5 yrs.	Varies	High sch.	$118	Cert. & Deg.	8
University of Minnesota, Church Street, Minneapolis	University of Minnesota	4 yrs.	.....	High sch.	$360	B.S.	
College of St. Catherine, St. Paul, Minn.	The College of St. Catherine	2½ yrs.	Varies	1 yr. coll.	$210	Degree	4
Washington University School of Medicine, St. Louis	Washington University	3 yrs.	Sept	2 yrs. coll.	$400	Degree	10
University of New Hampshire, Durham	University of New Hampshire	5 yrs.	Sept	High sch.	$160	Cert. & Deg.	6
Columbia University College of Physicians and Surgeons, 630 W. 168th St., New York City	Columbia University	1½ yrs.	Sept	Degree	$450	Certificate	38
		2½ yrs.	Sept	2 yrs. coll.	$450	Degree	
New York University School of Education, 100 Washington Sq., E., New York City	New York University	4½ yrs.	Feb Sept	High sch.	$300	Cert. & Deg.	20
Ohio State University, Columbus	Ohio State University	3 yrs.	Quarterly	High sch.	$105	Degree	21
Philadelphia School of Occupational Therapy, 419 S. 19th St., Philadelphia	University of Pennsylvania	1½ yrs.	Sept	Degree	$240	Diploma	35
		3 yrs.	Sept	1 yr. coll.	$240	Diploma	
				High sch.	$480		
Texas State College for Women, Denton, Texas	Texas College for Women	5 yrs.	Feb Sept	High sch.	$150	Degree	13
Richmond Professional Institute, 901 W. Franklin St., Richmond, Va.	Medical College of Virginia	1½ yrs.	Sept	Degree	$300	Certificate	20
		3 yrs.	Sept	1 yr. coll.	$300	Certificate	
College of Puget Sound, Tacoma, Wash.	College of Puget Sound	3 yrs.	Feb Sept	Degree	$150	Certificate	
		5 yrs.	Feb Sept	High sch.	$300	Cert. & Deg.	
University of Wisconsin, Madison	University of Wisconsin	4 yrs.	Feb Sept	High sch.	$320	Cert. & Deg.	8
Milwaukee-Downer College, Dept. of Occupational Therapy, 2512 E. Hartford, Milwaukee	Milwaukee-Downer College	2½ yrs.	Sept	1 yr. coll.	$300	Diploma	27
		4 yrs.	Sept	High sch.	$300	Dipl. & Deg.	
Mount Mary College, 2900 Menomonee River Dr., Milwaukee		Varies	Sept	Degree	$225	Certificate	15
		5 yrs.	Sept	High sch.	$240	B.S. Degree	
University of Toronto, Dept. of University Extension, Toronto, Ont., Canada	University of Toronto	3 yrs.	Sept	1 yr. coll.	$272	Diploma	110

SCHOOLS FOR PHYSICAL THERAPY TECHNICIANS

The House of Delegates of the American Medical Association in 1934 requested that some plan be effected for the establishment of standards, ratings and inspections of schools for the training of physical therapy technicians. The Council on Medical Education and Hospitals assumed responsibility for this program and by 1936 had completed a survey of these schools. Certain minimum standards were formulated. These were presented to the House of Delegates of the American Medical Association and were ratified in May 1936. The first list of 13 approved schools appeared in THE JOURNAL in August 1936. Revisions have been published annually since that time.

There are 25 approved schools, with 1 new school approved in 1947. Twenty-one schools reported a total of 383 graduates of their regular courses. Ten schools offering advanced courses reported satisfactory completion of these courses by 20 students. The reports anticipate an approximately equal number of graduates in 1948.

Entrance requirements include graduates of accredited schools of nursing, graduates of physical education courses or collegiate training including science courses. Eighteen of the schools admit nurses, 15 accept physical education graduates and all but 2 of the schools will permit college students to enroll in the one year curriculum. The list of schools requiring college training for admission contains 14 that specify three years of college credits, 10 which mention two years of credits, and 4 that require a degree. A total of eight courses are combined with college curriculums, so that high school graduates can obtain a degree in physical therapy after four academic years of study. All but 7 of the schools offer college credits, although 2 schools which list two courses state that only one course will permit the student to accumulate college credit.

The length of training is twelve months in most instances, but 3 schools require fourteen, fifteen and twenty-four months respectively for the regular course, while high school graduates must complete the four year program.

APPROVED SCHOOLS FOR PHYSICAL THERAPY TECHNICIANS

Council on Medical Education and Hospitals of the American Medical Association

Name and Location of School	Medical Director and Technical Director	Entrance Requirements*	Duration of Course	Time of Admission	Maximum Enrolment	Tuition	Certificate, Diploma, Degree
Children's Hospital, Los Angeles	Samuel Mathews, M.D. Miss Sarah S. Rogers	a-b-d	14 mos.	Sept	14	$200	Certificate
College of Medical Evangelists, Los Angeles [1]	Fred B. Moor, M.D. R. William Beidan	a-b-e	12 mos.	Sept	16	$256.50	Cert. & Degree
University of Southern California, Los Angeles	O. L. Huddleston, M.D. Miss Charlotte W. Anderson	a-b-d	14 mos.	Sept	20	$561	Certificate
University of California Hospital, San Francisco [1]	Frances Baker, M.D. Mrs. Margery Wagner	d-e	12 mos.	Sept	12	$250[3]	Cert. or Degree
Stanford University, Stanford University, Calif.	W. H. Northway, M.D. Miss Lucille Daniels	a-b-d	12 mos.	JanJune	24	$325.50	Cert. or Degree
University of Colorado Medical Center, Denver [1]	Harold Dinken, M.D. Miss Mary Lawrence	a-b-d	12 mos.	Sept	12	$300[3]	Certificate
Northwestern University Medical School, Chicago	John S. Coulter, M.D. Miss Gertrude Beard	a-b-d	12 mos.	Oct	16	$400 yr.	Certificate
State University of Iowa Medical School, Iowa City	D. D. Paul, M.D. Miss Olive C. Farr	b-e	12 mos.	Sept	12	$200	Certificate
University of Kansas School of Medicine, Kansas City [1]	Donald L. Rose, M.D. Mrs. Ruth G. Monteith	a-b-e[2]	12 mos.	Feb.Sept	15	$ 80[3]	Certificate
Bouve-Boston School of Physical Education, Boston	Howard Moore, M.D. Miss Constance Greene	H.S.	4 yrs.	Sept	15	$500	Dipl. & Degree
Simmons College, Boston	W. T. Green, M.D. Miss J. B. Merrill	a-b-d	16 mos.	.....	20	$550	Diploma
Boston University College of Physical Education for Women, Sargent College, Cambridge, Mass.	Kenneth Christophe, M.D. Miss Adelaide McGarrett	e-d	12 mos.	Sept	28	Varies	Cert. or Degree
University of Minnesota, Minneapolis [1]	M. E. Knapp, M.D. Miss Ruby Green	H.S.	4 yrs.	Sept	16	$150[3] yr.	Degree
Mayo Clinic, Rochester, Minn.	F. H. Krusen, M.D. Miss Lucille Fitzpatrick	a-b-e	12 mos.	Sept	30	None	Certificate
Barnes Hospital, St. Louis	F. H. Ewerhardt, M.D. Miss B. F. Schulz	a-b-e	12 mos.	Oct	12	$250	Certificate
St. Louis University School of Nursing, St. Louis [1]	A. J. Kotkis, M.D. Sister Mary Imelda	2	4 yrs.	JanSept	10	$300 yr.	Degree
Albany Hospital, Albany, N. Y.	J. W. Ghormley, M.D. Catherine Graham	a-b-e	12 mos.	Sept	6	$200	Certificate
Columbia University College of Physicians and Surgeons, New York City [1]	William Snow, M.D. Floy Pinkerton	a-e	2 yrs.	Sept	25	$940	Degree
New York University School of Education, New York City [1]	George G. Deaver, M.D. Miss Elizabeth Addoms	a-b-d	12 mos.	Sept	40	$540	Cert. or Degree
Duke Hospital, Durham, N. C.[1]	Lenox D. Baker, M.D. Miss Helen Kaiser	a	15 mos.	Oct	12	$300	Certificate
D. T. Watson School of Physiotherapy, Leetsdale, Pa.[1]	Jessie Wright, M.D. Miss Kathryn Kelley	a-b-d	12 mos.	Oct	30	$300	Diploma
Graduate Hospital of the University of Pennsylvania, Philadelphia [1]	George M. Piersol, M.D. Miss D. E. Baethke	a-b-e	12 mos.	Sept	20	$300	Certificate
University of Texas School of Medicine, Galveston [1]	G. W. N. Eggers, M.D. Miss Ruby Decker	a-b-d	12 mos.	Jan	8	$145[3]	Certificate
Baruch Center of Physical Medicine of the Medical College of Virginia, Richmond, in affiliation with Richmond Professional Institute [1]	Walter Jerome Lee, M.D. Miss Susanne Hirt	a-b-d	12 mos.	Sept	48	$300	Dipl. or Degree
University of Wisconsin Medical School, Madison [1]	Harry Bowman, M.D. Miss Margaret A. Kohli	a-b-e[2]	12 mos.	Feb.Sept	20	$150[3] yr.	Cert. & Degree

* Courses are so arranged that any of the entrance requirements will qualify students for training. a = Graduation from accredited school of nursing; b = Graduation from accredited school of physical education; c = Two years of college with science courses; d = Three years of college with science courses; e = Four years of college with science courses. H.S. = High school graduation.

1. Male students are admitted.
2. High school graduates admitted to four-year course leading to degree.
3. Non-residents charged additional fee.

SCHOOLS FOR MEDICAL TECHNOLOGISTS

The original survey of 196 schools for medical technologists was published in THE JOURNAL, Aug. 29, 1936, together with the first list of 96 approved schools. Essentials had been formulated by the Council on Medical Education and Hospitals of the American Medical Association with the cooperation of the American Society of Clinical Pathologists and ratified by the House of Delegates of the American Medical Association in May 1936.

There are 337 schools reported in the current list with 45 states represented. This is an increase of 44 schools. One school was discontinued.

Concerning entrance requirements, 239 schools admit students who have completed two years of college subjects, 52 require three years of college preparation and 38 require a degree for admission. The requirements for admission to 4 schools are intermediate between two and four years.

The course length in 278 of the schools is twelve months. Of the remainder, 31 give courses of eighteen months, 14 of fifteen months and 8 of twenty-four months.

Of the 337 schools listed, 213 require no tuition, an increase of approximately 12 per cent. Excluding university fees, less than 5 per cent of the schools charge over $150 for the course. Approximately 100 independent schools have tuition fees and 28 more are required to collect university fees.

Certificates are issued by 204 schools on completion of the course. Diplomas are granted at 47 schools, and 73 schools have college or university affiliations which give their students a degree. Forty-seven schools offer no certifying instrument.

The maximum enrolment was 2,239, an increase over last year of 192. There were 1,206 graduates, which was 128 more than the previous year. It is anticipated that 1,582 students will be graduated next year.

Correspondence regarding schools for the training of medical technologists should be addressed to the office of the Council on Medical Education and Hospitals. Graduates of approved schools desiring registration should communicate with the Board of Registry of Medical Technologists, Ball Memorial Hospital, Muncie, Indiana.

APPROVED SCHOOLS FOR MEDICAL TECHNOLOGISTS

Council on Medical Education and Hospitals of the American Medical Association

NOTE: Under "Tuition" the letter B indicates that a breakage fee is charged; the letter U indicates university fees. Students lacking the scholastic requirements should contact the registrar of the college or university and not the hospital. Those who wish to enroll in a course given by the college or university or who desire to transfer their credits should correspond with the registrar and not the hospital.

Name and Location of School	College Affiliation	Pathologist in Charge	Minimum Prerequisite College	Length of Training in Months	Maximum Enrolment	Classes Begin	Tuition
ALABAMA							
Baptist Hospital, Birmingham [a]	Alabama Coll.[b]; Howard Coll.[b]	A. E. Casey, M.D.	3½ yrs.	12	6	Varies	None
Jefferson and Hillman Hospitals, Birmingham [a]	Univ. of Alabama School of Medicine	H. R. Kracke, M.D.	2 yrs.	12	18	June-Oct	B
Norwood Hospital, Birmingham [a]		J. A. Cunningham, M.D.	2 yrs.	12	4	Jan-June	None
South Highlands Infirmary, Birmingham [a]		J. A. Cunningham, M.D.	2 yrs.	12	2	Jan-Sept	None
Employees Hospital, Fairfield		L. C. Posey, M.D.	2 yrs.	12	4	Varies	None
St. Margaret's Hospital, Montgomery [a]	Huntingdon College [b]	C. R. Lafferty, M.D.	Degree	12	4	Jan-June	B
ARIZONA							
St. Joseph's Hospital, Phoenix [a]	Arizona State Teachers Coll. (Tempe)[b]	O. O. Williams, M.D.	3 yrs.	12	4	July	$125
ARKANSAS							
University Hospital, Little Rock [a]	Univ. of Arkansas School of Med.[b]	A. Nettleship, M.D.	2 yrs.	12	20	Sept	$180
CALIFORNIA							
Herrick Memorial Hospital, Berkeley [a]		H. B. Fishback, M.D.	Degree	12	2	Feb-July	None
Childrens Hospital, Los Angeles		R. E. Knutti, M.D.	Degree	12	6	Varies	None
Los Angeles County Hospital, Los Angeles [a]		E. M. Butt, M.D.	Degree	14	18	Varies	None
St. Vincent's Hospital, Los Angeles		J. E. Kahler, M.D.	Degree	12	2	Varies	B
White Memorial Hospital, Los Angeles [a]	College of Medical Evangelists [b]	O. B. Pratt, M.D.	3 yrs.	15	12	Quarterly	$100
Collis P. and Howard Huntington Memorial Hospital, Pasadena		A. G. Foord, M.D.	Degree	12	9	July	B
Univ. of California Med. School, San Francisco [a]	University of California	J. Hopper Jr., M.D.	3 yrs.	12	24	Feb-Sept	$105
St. John's Hospital, Santa Monica [a]		G. J. Hummer, M.D.	Degree	12	2	July	None
COLORADO							
Colorado General Hospital, Denver [a]	University of Colorado [b]	E. R. Mugrage, M.D.	3 yrs.	12	16	Summer	U&B
Denver General Hospital, Denver [a]		F. McConnell, M.D.	2 yrs.	12	12	Varies	None
Mercy Hospital, Denver [a]	University of Denver [b]; Loretto Heights College [b]	A. W. Freshman, M.D.	3 yrs.	12	2	Quarterly	U&B
St. Anthony's Hospital, Denver [a]	University of Denver [b]; Loretto Heights College [b]	A. W. Freshman, M.D.	3 yrs.	12	4	Quarterly	U&B
St. Joseph's Hospital, Denver [a]	St. Mary College (Xavier, Kan.)	E. I. Dobos, M.D.	4 yrs.	12	3	July	None
CONNECTICUT							
Danbury Hospital, Danbury [a]		P. T. Mellroy, M.D.	2 yrs.	12	3	Varies	None
Hartford Hospital, Hartford		R. F. Kendall, M.D.	2 yrs.	12	4	Varies	None
St. Francis Hospital, Hartford		L. F. Hasting, M.D.	2 yrs.	12	3	.....	None
New Britain General Hospital, New Britain		P. D. Rosahn, M.D.	Degree	12	5	Oct	None
Waterbury Hospital, Waterbury		J. O. Collins, M.D.	2 yrs.	12	3	Varies	$75
DELAWARE							
Delaware Hospital, Wilmington		J. W. Howard, M.D.	2 yrs.	12	4	.....	None
Wilmington General Hospital, Wilmington [a]		O. J. Pollack, M.D.	2 yrs.	18	2	July	None
DISTRICT OF COLUMBIA							
Doctors Hospital, Washington [a]	American University [b]	O. B. Hunter, M.D.	2 yrs.	12	6	Quarterly	None
Freedmen's Hospital, Washington	Howard University	F. B. Johnson, M.D.	3 yrs.	24	5	Varies	U
Garfield Memorial Hospital, Washington [a]		E. C. Rice, M.D.	2 yrs.	12	6	Varies	None
George Washington Univ. Hosp., Washington	George Washington Univ. Med. Sch.	R. M. Cholmer, M.D.	2 yrs.	12	6	Varies	None
Providence Hospital, Washington [a]		H. H. Leiber, M.D.	2 yrs.	12	4	Varies	None
Sibley Memorial Hospital, Washington [a]	American University [b]	O. B. Hunter, M.D.	2 yrs.	12	4	Quarterly	None
FLORIDA							
Florida State Hospital, Chattahoochee [a]	Florida State University [b]	E. H. Buediger, M.D.	3 yrs.	12	5	Varies	None
St. Vincent's Hospital, Jacksonville [a]		K. A. Murray, M.D.	Degree	12	2	Varies	None
Jackson Memorial Hospital, Miami [a]		Ph. B. Rezek, M.D.	Degree	12	16	Varies	None

APPROVED SCHOOLS FOR MEDICAL TECHNOLOGISTS—Continued

Name and Location of School	College Affiliation	Pathologist in Charge	Minimum Pre-requisite College	Length of Training in Months	Maximum Enrollment	Classes Begin	Tuition
GEORGIA							
Crawford W. Long Memorial Hospital, Atlanta [a]		D. Ayer Jr., M.D.	2 yrs.	12	2	JanJune	None
Georgia Baptist Hospital, Atlanta		J. Funke, M.D.	2 yrs.	12	2	JanJune	None
Grady Memorial Hospital, Atlanta [a]	Emory University	W. Sheldon, M.D.	2 yrs.	12	13	Varies	None
Piedmont Hospital, Atlanta	Emory University Medical School	W. B. Mathews, M.D.	Degree	12	4	Quarterly	None
St. Joseph's Infirmary, Atlanta	Emory University Medical School	W. B. Mathews, M.D.	Degree	12	2	MarSept	None
University Hospital, Augusta [a]	Univ. of Georgia School of Medicine	E. R. Pund, M.D.	2 yrs.	12	2	Sept	$90B
Columbus City Hospital, Columbus		C. L. Blumstein, M.D.	2 yrs.	12-18	1	.....	None
Emory University Hospital, Emory University	Emory University	S. Madden, M.D.	2 yrs.	13	6	Varies	None
IDAHO							
St. Luke's Hospital, Boise [a]		J. Beeman, M.D.	2 yrs.	12	4	Varies	None
ILLINOIS							
Copley Hospital, Aurora [a]	Aurora College [b]	C. C. Mason, M.D.	3 yrs.	12	3	Varies	B
St. Joseph's Hospital, Bloomington	Illinois State Normal University	B. Markowitz, M.D.	2 yrs.	12	6	Varies	$25
City of Chicago Municipal Tuberculosis Sanitarium, Chicago [a]		H. C. Sweany, M.D.	2 yrs.	15	16	Quarterly	B
Michael Reese Hospital, Chicago		O. Saphir, M.D.	2 yrs.	18	18	Every 2 mo.	$150
Mt. Sinai Hospital, Chicago [a]	Roosevelt College [b]	I. Davidsohn, M.D.	2 yrs.	12-18	13	Varies	$170B
Northwestern Univ. Medical School, Chicago	Northwestern University Med. Sch. [b]	O. E. Hepler, M.D.	2 yrs.	12	12	Monthly	$50
Provident Hospital, Chicago [a]		A. C. Weob, M.D.	2 yrs.	12	5	Monthly	$30
St. Bernard's Hospital, Chicago [a]		C. S. Hagerty, M.D.	2 yrs.	12	8	Monthly	$30B
U. S. Marine Hospital, Chicago [a]	University of Illinois	H. Kunt, M.D.	2 yrs.	12	1	Sept	None
Wesley Memorial Hospital, Chicago	Northwestern Univ. Medical School	T. C. Lalpply, M.D.	2 yrs.	12	24	.....	$175
Evanston Hospital, Evanston	Northwestern University	J. C. McCarter, M.D.	2 yrs.	12	4	JanJuly	$40
St. Frances Hospital, Evanston		H. I. Brown, M.D.	2 yrs.	12	4	Varies	B
Methodist Hospital of Central Illinois, Peoria [a]		D. O. Mansbardt, M.D.	2 yrs.	12	3	Varies	$30B
St. Francis Hospital, Peoria [a]		J. L. Kraus, M.D.	2 yrs.	12	7	Sept	$100B
Rockford Memorial Hospital, Rockford		W. Bissell, M.D.	2 yrs.	12	..	July	B
St. Anthony's Hospital, Rockford [a]		A. R. K. Matthews, M.D.	2 yrs.	15	6	Varies	$25
Memorial Hospital, Springfield [a]		A. Vass, M.D.	2 yrs.	12	6	FebSept	$100
St. John's Hospital, Springfield	Quincy College [b]	H. M. Sierp, M.D.	2 yrs.	12	12	Sept	$30
St. Therese's Hospital, Waukegan	DePaul University	G. J. Rukstinat, M.D.	2 yrs.	12	8	Sept	$100B
INDIANA							
St. Joseph Hospital, Fort Wayne [a]	St. Francis College [b]	S. M. Rabson, M.D.	2 yrs.	12	3	Varies	$125B
Indiana University Med. Center, Indianapolis [a]	Indiana University [b]	J. L. Arbogast, M.D.	2½ yrs.	12	12	Sept	U&B
Methodist Hospital, Indianapolis	Butler University [b]; Franklin Coll. [b]	L. H. Hoyt, M.D.	Degree	12	6	Varies	$30
St. Elizabeth's Hospital, Lafayette [a]	Michigan State College	J. M. McFadden, M.D.	2 yrs.	12	6	Oct	$100B
South Bend Medical Laboratory, South Bend		A. S. Giordano, M.D.	2 yrs.	18	2	JanJuly	$125
IOWA							
Mercy Hospital, Cedar Rapids		R. F. Welland, M.D.	2 yrs.	12	3	JanJuly	None
St. Luke's Methodist Hospital, Cedar Rapids		R. F. Welland, M.D.	2 yrs.	12	2	Varies	None
Mercy Hospital, Des Moines [a]		F. C. Coleman, M.D.	3 yrs.	12	2	July	None
St. Joseph Mercy Hospital, Dubuque [a]		F. T. Thompson, M.D.	2 yrs.	12	4	July	None
St. Joseph Mercy Hospital, Sioux City [a]	Briar Cliff College	E. A. Fullgrabe, M.D.	2 yrs.	12	4	July	None
KANSAS							
Bethany Hospital, Kansas City		W. W. Summerville, M.D.	2 yrs.	12	6	Varies	None
Providence Hospital, Kansas City		V. B. Bubler, M.D.	2 yrs.	12	3	Varies	None
University of Kansas Hospitals, Kansas City [a]	University of Kansas	L. H. Leger, M.D.	Degree	12	24	July	None
The Lattimore Laboratories, Topeka [a]	L. H. Lattimore, M.D.	L. H. Lattimore, M.D.	2 yrs.	12	2	JanJune	None
St. Francis Hospital, Wichita	University of Wichita [b]	C. A. Hellwig, M.D.	2 yrs.	12	10	FebSept	$150
Wichita Hospital, Wichita [a]	Sacred Heart College	L. C. Murphy, M.D.	2 yrs.	12	6	JuneSept	$125B
KENTUCKY							
Good Samaritan Hospital, Lexington [a]	University of Kentucky [b]	F. S. Maxwell, M.D.	3 yrs.	12	30	Quarterly	U&B
St. Joseph's Hospital, Lexington		F. S. Maxwell, M.D.	2 yrs.	12	4	JanSept	$150
Kentucky State Department of Health Laboratory, Louisville [a]		L. H. Smith, M.D.	2 yrs.	12	50	Varies	$300
Norton Memorial Infirmary, Louisville [a]		W. R. Platt, M.D.	2 yrs.	12	4	Quarterly	$150
St. Joseph's Infirmary, Louisville [a]	Nazareth College [b]	S. H. Black, M.D.	3½ yrs.	12	6	JulySept	$75
SS. Mary and Elizabeth Hospital, Louisville	Nazareth College [b]	S. H. Black, M.D.	2 yrs.	12	2	Sept	$150B
LOUISIANA							
Charity Hospital, New Orleans [a]		F. S. Moss, M.D.	Degree	12	24	Monthly	None
Mercy Hosp.-Soniat Memorial, New Orleans [a]	Loyola University [b]	G. H. Hauser, M.D.	Degree	12	10	Yearly	None
Southern Baptist Hospital, New Orleans		F. H. Lawson, M.D.	2 yrs.	12	12	Quarterly	None
U. S. Marine Hospital, New Orleans [a]		G. Adams, M.D.	2 yrs.	12	4	JanSept	None
T. E. Schumpert Memorial Sanit., Shreveport [a]	Northwestern State College [b]	W. F. Butler, M.D.	2 yrs.	12	6	Varies	$50
Shreveport Charity Hospital, Shreveport [a]	Northwestern State College [b]	W. R. Mathews, M.D.	2 yrs.	12	4	JanSept	None
MAINE							
Eastern Maine General Hospital, Bangor [a]	University of Maine [b]	R. C. Wadeworth, M.D.	3 yrs.	18	2	July	$150B
Central Maine General Hospital, Lewiston	Colby College [b]; Univ. of Maine [b]	J. Gottlieb, M.D.	2 yrs.	12	8	Varies	$150
Maine General Hospital, Portland		J. E. Porter, M.D.	2 yrs.	12	8	Varies	None
MARYLAND							
Mercy Hospital, Baltimore	Mount St. Agnes [b]	H. T. Collenberg, M.D.	2 yrs.	24	20	Sept	U&B
St. Joseph's Hospital, Baltimore [a]	Coll. of Notre Dame of Maryland [b]	H. L. Wolkenwelser, M.D.	2 yrs.	12	4	Varies	None
Union Memorial Hospital, Baltimore [a]		W. C. Merkel, M.D.	2 yrs.	12	5	AprSept	$145
MASSACHUSETTS							
Faulkner Hospital, Boston	Simmons College [b]	P. M. LeCompte, M.D.	Degree	12	2	JanSept	U
Massachusetts Memorial Hospitals, Boston [a]		C. S. Keefer, M.D.	2 yrs.	12	8	MarSept	None
New England Deaconess Hospital, Boston		S. Warren, M.D.	2 yrs.	18	4	.....	None
New England Hospital for Women and Children, Boston		G. I. Muller, M.D.	2 yrs.	12	4	JulySept	B
Truesdale Hospital, Fall River [a]		W. Freeman, M.D.	2 yrs.	12	4	Quarterly	None
Holyoke Hospital, Holyoke	University of Massachusetts	W. Kaufmann, M.D.	Degree	12	6	.....	None
St. Luke's Hospital, Pittsfield		E. F. Joslin, M.D.	2 yrs.	15	2	.....	None
Salem Hospital, Salem		D. A. Nickerson, M.D.	Degree	12	2	July	None
Mercy Hospital, Springfield		J. Rini, M.D.	2 yrs.	12	6	Quarterly	None
Taunton State Hospital, Taunton [a]		H. N. Naumann, M.D.	2 yrs.	12	4	July	None
Tewksbury State Hospital and Infirmary, [a] Tewksbury		H. S. Glidden, M.D.	2 yrs.	12	2	Varies	None
Worcester City Hospital, Worcester		R. H. Goodale, M.D.	2 yrs.	12	6	Varies	None
Worcester State Hospital, Worcester [a]		W. Freeman, M.D.	2 yrs.	12	3	JanJuly	None
MICHIGAN							
University Hospital, Ann Arbor	University of Michigan [b]	F. H. Bethell, M.D.	3 yrs.	12	16	June	$300
Leila Y. Post Montgomery Hosp., Battle Creek		G. W. Schelm, M.D.	Degree	12	3	Varies	None
Mercy Hospital, Bay City [a]		W. G. Gamble Jr., M.D.	2 yrs.	12	3	Varies	$100

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APPROVED SCHOOLS FOR MEDICAL TECHNOLOGISTS—Continued

Name and Location of School	College Affiliation	Pathologist in Charge	Minimum Prerequisite College	Length of Training in Months	Maximum Enrolment	Classes Begin	Tuition
MICHIGAN—Continued							
Chas. Godwin Jennings Hospital, Detroit [a]	Wayne University [b]	M. E. Maun, M.D.	3 yrs.	12	2	Varies	U
City of Detroit Receiving Hospital, Detroit	Wayne University [b]	O. A. Brines, M.D.	3 yrs.	12	12	July	$100
Evangelical Deaconess Hospital, Detroit	Wayne University [b]	M. E. Madsen, M.D.	3 yrs.	12	2	JanJuly	$100B
Grace Hospital, Detroit	Wayne Univ. [b]; Mich. State Coll. [b]	C. I. Owen, M.D.	2 yrs.	12	10	Varies	None
Henry Ford Hospital, Detroit [a]	Wayne University [b]	F. W. Hartman, M.D.	Degree	18	18	Varies	None
Mt. Carmel Mercy Hospital, Detroit	Mercy College [b]	L. W. Gardner, M.D.	3 yrs.	12	12	Sept	$150
Providence Hospital, Detroit [a]	Wayne University [b]	D. H. Kaump, M.D.	2 yrs.	12	12	Varies	$100
St. Mary's Hospital, Detroit [a]		M. E. Maun, M.D.	2 yrs.	12	8	July	$100
Woman's Hospital, Detroit	Wayne Univ. [b]; Mich. State Coll. [b]	D. C. Beaner, M.D.	3 yrs.	12	12	JulySept	$100
Wayne County General Hospital, Eloise	Wayne Univ. [b]; Univ. of Detroit [b]; Michigan State College [b]	S. E. Gould, M.D.	Degree	12	8	Quarterly	None
Hurley Hospital, Flint [a]	Michigan State College [b]	R. J. Jermstad, M.D.	3 yrs.	12	7	July	None
St. Joseph Hospital, Flint [a]	Michigan State University [b]	R. J. Jermstad, M.D.	2 yrs.	12	2	July	None
Blodgett Memorial Hospital, Grand Rapids [a]	Michigan State College [b]	C. A. Payne, M.D.	2 yrs.	12	4	July	None
Butterworth Hospital, Grand Rapids [a]		P. A. Van Pernis, M.D.	2 yrs.	12	12	July	None
St. Mary's Hospital, Grand Rapids [a]		E. F. Ducey, M.D.	2 yrs.	12	4	FebJuly	None
Borgess Hospital, Kalamazoo	Western Michigan College [b]; Michigan State College [b]; Nazareth College [b]	H. R. Prentice, M.D.	2 yrs.	12	3	July	None
Bronson Methodist Hospital, Kalamazoo	Western Michigan College [b]; Michigan State College [b]	H. R. Prentice, M.D.	2 yrs.	12	5	July	B
Edward W. Sparrow Hospital, Lansing	Michigan State College [b]	C. E. Black, M.D.	3 yrs.	12	6	Varies	None
Michigan Department of Health Bureau of Laboratories, Lansing [a]		H. E. Cope, M.D.	3 yrs.	12	45	Varies	None
St. Lawrence Hospital, Lansing	Michigan State College [b]	C. E. Black, M.D.	3 yrs.	12	6	Varies	None
Port Huron Hospital, Port Huron [a]	Michigan State College [b]	W. E. B. Hall, M.D.	2 yrs.	12	2	July	None
Saginaw General Hospital, Saginaw		R. Bucklin, M.D.	2 yrs.	12	4	.....	B
Wyandotte General Hospital, Wyandotte [a]		W. A. Stryker, M.D.	3 yrs.	12	2	July	$100
MINNESOTA							
St. Luke's Hospital, Duluth	Michigan State Coll.; Hamline Univ.; Duluth State Teachers' College	A. H. Weiss, M.D.	2 yrs.	18	10	JanJuly	None
St. Mary's Hospital, Duluth	College of St. Scholastica [b]	W. V. Knoll, M.D.	3 yrs.	12	14	Varies	$75B
Minneapolis General Hospital, Minneapolis	University of Minnesota [b]	S. S. Barron, M.D.	Degree	12	18	Varies	None
Swedish Hospital, Minneapolis	Gustavus Adolphus College [b]	S. V. Lofsness, M.D.	2 yrs.	12	8	Varies	$125
University Hospitals, Minneapolis [a]	University of Minnesota [b]	G. T. Evans, M.D.	3 yrs.	12	60	Quarterly	U
St. Cloud Hospital, St. Cloud [a]	St. Cloud Teachers College [b]; St. Benedict's College	P. E. Stangl, M.D.	2 yrs.	18	3	Fall	None
Ancker Hospital, St. Paul	University of Minnesota [b]	J. F. Noble, M.D.	3 yrs.	12	3	July	None
Charles T. Miller Hospital, St. Paul [a]	Macalester College [b]	K. Ikeda, M.D.	3 yrs.	12	12	FebJuly	$100
MISSISSIPPI							
Mississippi Baptist Hospital, Jackson		F. G. Bratley, M.D.	2 yrs.	12	4	.....	None
Mercy Hospital-Street Memorial, Vicksburg [a]	Mississippi State College [b]	R. H. Fenstermacher, M.D.	2 yrs.	12	8	Varies	B
MISSOURI							
St. Louis County Hospital, Clayton [a]	LeClere College [b]	H. C. Allen, M.D.	2 yrs.	12	6	Varies	None
Kansas City General Hospital, Kansas City		V. B. Buhler, M.D.	2 yrs.	18	18	Monthly	None
Kansas City General Hosp. No. 2, Kansas City [a]		V. B. Buhler, M.D.	2 yrs.	18	4	Monthly	None
Menorah Hospital, Kansas City [a]		R. Koritschoner, M.D.	Degree	12	5	Quarterly	None
Research Hospital, Kansas City		H. B. Allebach, M.D.	2 yrs.	12	10	Varies	None
St. Joseph Hospital, Kansas City		R. W. Kerr, M.D.	Degree	12	12	Varies	B
St. Luke's Hospital, Kansas City		F. C. Helwig, M.D.	2 yrs.	15	12	Monthly	None
St. Mary's Hospital, Kansas City [a]		A. E. Upsher, M.D.	Degree	12	6	Varies	B
Barnes Hospital, St. Louis	Washington Univ. School of Medicine	G. J. Dammin, M.D.	2 yrs.	12	6	Jan	$50
Firmin Desloge Hospital, St. Louis	St. Louis University [b]	G. O. Broun, M.D.	3 yrs.	12	15	Sept	$150
Homer G. Phillips Hospital, St. Louis [a]		J. A. Saxton Jr., M.D.	2 yrs.	18-24	5	Varies	None
St. Anthony's Hospital, St. Louis	Marquette University (Milwaukee) [b]	B. C. Portuondo, M.D.	3 yrs.	12	1	Varies	None
St. Louis City Hospital, St. Louis		J. A. Saxton Jr., M.D.	2 yrs.	15	8	Quarterly	None
Burge Hospital, Springfield	Drury College [b]	E. B. Hanan, M.D.	2 yrs.	12	5	June	B
MONTANA							
St. Vincent's Hospital, Billings		M. E. Martin, M.D.	3 yrs.	12	3	Varies	None
Murray Hospital, Butte [a]	University of Montana [b]; Montana State College [b]	R. F. Peterson, M.D.	3 yrs.	12	4	June	None
Columbus Hospital, Great Falls [a]	College of Great Falls [b]	C. M. Mezey, M.D.	4 yrs.	12	4	JuneSept	None
NEBRASKA							
Bryan Memorial Hospital, Lincoln [a]	Nebraska Wesleyan University [b]	F. H. Tanner, M.D.	2 yrs.	12	6	Varies	B
Lincoln General Hospital, Lincoln [a]		F. H. Tanner, M.D.	2 yrs.	12	6	Quarterly	None
St. Elizabeth Hospital, Lincoln		J. M. Neely, M.D.	2 yrs.	12	3	.....	None
Bishop Clarkson Memorial Hospital, Omaha		J. P. Tollman, M.D.	2 yrs.	12	5	Varies	$25
Creighton Memorial St. Joseph's Hosp., Omaha [a]	Creighton University [b]	R. C. Russum, M.D.	3 yrs.	12	12	Quarterly	$100
University of Nebraska Hospital, Omaha [a]	Univ. of Nebraska College of Medicine	J. P. Tollman, M.D.	2 yrs.	12	8	Varies	$15
NEVADA							
St. Mary's Hospital, Reno	University of Nevada [b]	L. Parsons, M.D.	3 yrs.	18	2	JanJuly	None
NEW HAMPSHIRE							
Concord Hospital, Concord		J. Park, M.D.	2 yrs.	12	4	Varies	None
Mary Hitchcock Memorial Hospital, Hanover [a]	Colby Junior College [b]	R. F. Miller, M.D.	2 yrs.	12	8	Quarterly	B
Elliot Hospital, Manchester [a]		S. M. Brooks, M.D.	2 yrs.	12	2	July	B
Notre Dame Hospital, Manchester		R. E. Biron, M.D.	2 yrs.	15	2	JanJuly	$100
NEW JERSEY							
Newark Beth Israel Hospital, Newark [a]	Newark University [b]	L. M. Goldman, M.D.	2 yrs.	12	10	Varies	$50
Newark City Hospital, Newark [a]	New York University [b]	H. S. Martland, M.D.	3 yrs.	12	7	June	U&B
Presbyterian Hospital, Newark [a]	Rutgers University [b]	S. A. Goldberg, M.D.	2 yrs.	12	4	Sept	B
St. Michael's Hospital, Newark [a]	Seton Hall College	S. J. Rose, M.D.	2 yrs.	15	2	JanJuly	$100
Mercer Hospital, Trenton		T. K. Rathmell, M.D.	2 yrs.	18	3	.....	$150
NEW YORK							
Bender Hygienic Laboratory, Albany [a]	Union University	J. J. Clemmer, M.D.	2 yrs.	18	15	Sept	$300
Binghamton City Hospital, Binghamton [a]		V. W. Bergstrom, M.D.	2 yrs.	12	3	Varies	$100
Jewish Hospital, Brooklyn [a]		D. M. Grayzel, M.D.	4 yrs.	18	6	Quarterly	None
Prospect Heights Hospital, Brooklyn [a]		S. H. Polayes, M.D.	2 yrs.	12	3	Varies	None
St. Mary's Hospital, Brooklyn [a]		W. Moltrier Jr., M.D.	2 yrs.	12	5	Mar Sept	B
Buffalo General Hospital, Buffalo [a]	University of Buffalo [b]	S. L. Vaughan, M.D.	2 yrs.	12	26	Varies	$50
Edward J. Meyer Memorial Hospital, Buffalo [a]	University of Buffalo [b]	D. K. Miller, M.D.	2 yrs.	12	10	Monthly	None
Arnot-Ogden Memorial Hospital, Elmira [a]		S. E. Cohen, M.D.	2 yrs.	12	4	Varies	None
St. Joseph's Hospital, Elmira [a]	Nazareth College [b]	L. Weiss, M.D.	2 yrs.	12	5	JuneSept	$100
Meadowbrook Hospital, Hempstead [a]	Adelphi College [b]	T. J. Curphey, M.D.	2 yrs.	18	3	Varies	None

APPROVED SCHOOLS FOR MEDICAL TECHNOLOGISTS—Continued

Name and Location of School	College Affiliation	Pathologist in Charge	Minimum Pre-requisite College	Length of Training in Months	Maximum Enrolment	Classes Begin	Tuition
NEW YORK—Continued							
Mary Immaculate Hospital, Jamaica [a]		M. Bevilacqua, M.D.	Degree	16	5	October	B
St. John's Long Island City Hospital, Long Island City [a]		J. Werne, M.D.	Degree	12-24	3	JanJuly	None
Montefiore Hospital for Chronic Diseases, New York City [a]	New York University [b]	S. H. Rosen, M.D.	3 yrs.	12	2	June	U
Rochester General Hospital, Rochester [a]		M. G. Bahrod, M.D.	Degree	18	12	Varies	$100
St. Mary's Hospital, Rochester [a]		S. M. Bouton, M.D.	Degree	12	4	Varies	None
Ellis Hospital, Schenectady [a]		E. KeTert, M.D.	2 yrs.	12-18	8	Varies	$100
U. S. Marine Hospital, Staten Island [a]	Wagner Memorial Lutheran College [b]	L. H. Sophian, M.D.	3½ yrs.	12	6	Quarterly	B
Samaritan Hospital, Troy [a]	Russell Sage College [b]	G. H. Klinck Jr., M.D.	2 yrs.	12	3	Sept	U
Grasslands Hospital, Valhalla [a]	New York University [b]	S. Gross, M.D.	3 yrs.	12	2	July	None
NORTH CAROLINA							
Charlotte Memorial Hospital, Charlotte	Queens College [b]	P. Kimmeistiel, M.D.	2 yrs.	12	5	July	B
Duke Hospital, Durham [a]	Duke University [b]	D. S. Martin, M.D.	2 yrs.	18	40	Sept	B
Watts Hospital, Durham [a]	University of North Carolina	J. U. Gunter, M.D.	2 yrs.	12	8	JanJuly	$50
North Carolina Baptist Hosp., Winston-Salem [a]	Salem College [b]; Wake Forrest Coll. [b]	C. C. Carpenter, M.D.	2 yrs.	12	12	October	$75
NORTH DAKOTA							
St. Alexius Hospital, Bismarck		L. W. Larson, M.D.	2 yrs.	12	6	.....	B
Grand Forks Deaconess Hospital, Grand Forks	University of North Dakota	A. K. Saiki, M.D.	2 yrs.	12	6	.....	None
Trinity Hospital, Minot [a]	Minot State Teachers College	P. J. Breslich, M.D.	2 yrs.	12	5	Sept	None
OHIO							
Children's Hospital, Akron [a]		M. R. Baker, M.D.	2 yrs.	12	2	JanJuly	None
City Hospital, Akron [a]		L. Catron, M.D.	2 yrs.	12	7	Varies	None
Peoples Hospital, Akron		G. R. Dochat, M.D.	2 yrs.	12	5	July	B
St. Thomas Hospital, Akron		G. G. Pyenkamer, M.D.	2 yrs.	12	2	.....	$100
Aultman Hospital, Canton		D. G. Henderson, M.D.	2 yrs.	12-15	3	July	None
Bethesda Hospital, Cincinnati	University of Cincinnati	E. A. Gall, M.D.	3 yrs.	12	1	Varies	U
Christ Hospital, Cincinnati	University of Cincinnati	J. W. Leichliter, M.D.	3 yrs.	12	4	Varies	U
Good Samaritan Hospital, Cincinnati	Coll. of Mt. St. Joseph on-the-Ohio [b]	W. M. Germain, M.D.	2 yrs.	12	5	Sept	$300
The Jewish Hospital, Cincinnati	University of Cincinnati	P. Wasserman, M.D.	2 yrs.	12	4	Varies	$125
Mt. Sinai Hospital, Cleveland	Flora Stone Mather Coll. [b]; Western Reserve University	B. S. Kline, M.D.	2 yrs.	12	12	Varies	$100
University Hospitals, Cleveland [a]	Flora Stone Mather College [b]	H. Z. Lund, M.D.	2 yrs.	12	19	Varies	$100
Mt. Carmel Hospital, Columbus [a]	Ohio University [b]	H. B. Davidson, M.D.	2 yrs.	12	12	Monthly	None
Starling-Loving University Hosp., Columbus [a]	Ohio State University [b]	H. L. Reinhart, M.D.	3 yrs.	12	30	Quarterly	U
Miami Valley Hospital, Dayton	University of Dayton [b]	M. Oosting, M.D.	2 yrs.	12	5	July	None
St. Elizabeth Hospital, Dayton [a]	University of Dayton [b]	W. Abramson, M.D.	2 yrs.	12	4	JanJune	U
Huron Road Hospital, East Cleveland [a]	Cleveland College [b]	E. Goodsitt, M.D.	2 yrs.	12	12	JanJuly	$50
Lakewood Hospital, Lakewood [a]	Baldwin Wallace [b]	O. Eltzen, M.D.	2 yrs.	12	8	Varies	$100
Springfield City Hospital, Springfield [a]		M. P. Hunter, M.D.	2 yrs.	12	5	Sept	B
Mercy Hospital, Toledo [a]	University of Toledo [b]	J. B. Rucker, M.D.	2 yrs.	12	3	JuneOct	None
Riverside Hospital, Toledo	University of Toledo [b]	S. S. Hindman, M.D.	Degree	12-24	.....	.....	.....
St. Vincent's Hospital, Toledo [a]	University of Toledo [b]	T. L. Ramsey, M.D.	3 yrs.	12	8	Varies	None
Toledo Hospital, Toledo	University of Toledo [b]	B. Steinberg, M.D.	2 yrs.	12	8	FebSept	$72 B
Youngstown Hospital, Youngstown		H. K. Giffen, M.D.	2 yrs.	12	10	October	$50
OKLAHOMA							
St. Anthony's Hospital, Oklahoma City	Univ. of Oklahoma Agricultural and Mechanical College [b]	H. Jeter, M.D.	Degree	12	8	Varies	None
University Hospitals, Oklahoma City [a]	Univ. of Oklahoma School of Med.	B. Halpert, M.D.	Degree	12	6	Varies	None
Wesley Hospital, Oklahoma City		W. F. Keller, M.D.	Degree	12	3	Varies	None
St. John's Hospital, Tulsa [a]	University of Tulsa	E. E. Palik, M.D.	Degree	12	8	Varies	None
OREGON							
Sacred Heart General Hospital, Eugene		E. D. Furrer, M.D.	2 yrs.	12	4	Varies	None
Emanuel Hospital, Portland		H. H. Foskett, M.D.	2 yrs.	12	2	Varies	B
Good Samaritan Hospital, Portland		C. H. Manlove, M.D.	2 yrs.	12	4	Varies	None
Portland Sanitarium and Hospital, Portland [a]	University of Oregon Med. School	W. C. Hunter, M.D.	2 yrs.	12	2	Varies	None
St. Vincent's Hospital, Portland [a]		F. P. Menne, M.D.	Degree	12	5	Sept	$185
University of Oregon Medical School Hospitals and Clinics, Portland [a]	University of Oregon Med. School	R. D. Grondahl, M.D.	2 yrs.	12	14	Varies	None
PENNSYLVANIA							
Abington Memorial Hospital, Abington [a]		J. Elman, M.D.	2 yrs.	16	8	Varies	None
Allentown Hospital, Allentown	Cedar Crest College [b]; Moravian College for Women [b]	J. J. Wenner, M.D.	2 yrs.	12	3	June	$75
Sacred Heart Hospital, Allentown [a]	Cedar Crest College [b]; Moravian College for Women [b]	D. E. Stader, M.D.	3 yrs.	12	6	JuneSept	$70
St. Luke's Hospital, Bethlehem	Moravian College for Women [b]	H. A. Rothrock, M.D.	2 yrs.	12	4	July	$100
Bryn Mawr Hospital, Bryn Mawr [a]		M. M. Strumia, M.D.	2 yrs.	15	4	Quarterly	$1.5
Geo. F. Geisinger Memorial Hospital, Danville	Bucknell University [b]	H. F. Hunt, M.D.	2 yrs.	12	6	FebJuly	.....
Fitzgerald-Mercy Hospital, Darby		A. Vahles-Dapena, M.D.	2 yrs.	12	4	Varies	None
Easton Hospital, Easton	Moravian College for Women [b]	E. Rubenstein, M.D.	2 yrs.	12	5	JulySept	None
St. Vincent's Hospital, Erie [a]		K. L. Burt, M.D.	2 yrs.	12	5	July	None
Harrisburg Hospital, Harrisburg		G. R. Moffitt, M.D.	2 yrs.	12	10	Varies	None
Harrisburg Polyclinic Hospital, Harrisburg		J. S. Forrester, M.D.	2 yrs.	12	4	July	$100
Hazleton State Hospital, Hazleton [a]	Penn. State College; Hazleton Undergraduate Center	J. Fokles, M.D.	2 yrs.	12	6	FebSept	B
Mercy Hospital, Johnstown [a]	Mt. Aloysius Junior College	B. J. McCaskey, M.D.	2 yrs.	12	4	June	None
Nesbitt Memorial Hospital, Kingston [a]		T. Baker, M.D.	2 yrs.	12	3	June	None
St. Joseph's Hospital, Lancaster		E. E. Ziegler, M.D.	2 yrs.	12	4	Monthly	B
Germantown Dispensary and Hosp., Philadelphia		F. B. Lynch Jr., M.D.	2 yrs.	12	5	FebSept	$90
Hahnemann Hospital, Philadelphia	Hahnemann Medical College	J. E. Gregory, M.D.	2 yrs.	24	24	.....	$100
Jefferson Medical College Hospital, Philadelphia	Jefferson Medical College	C. J. Bucher, M.D.	2 yrs.	18	12	MarSept	$100B
Jewish Hospital, Philadelphia [a]		C. Weiss, M.D.	2 yrs.	12	6	Quarterly	$100
Lankenau Hospital, Philadelphia		C. E. Brown, M.D.	2 yrs.	12	4	Sept	$100
Mt. Sinai Hospital, Philadelphia		D. R. Mercer, M.D.	2 yrs.	18	3	Varies	$150B
Pennsylvania Hospital, Philadelphia [a]	Hahnemann Medical College	A. R. Crane, M.D.	2 yrs.	12	15	Monthly	$100
Pepper Laboratory of Clinial Medicine, University of Pennsylvania, Philadelphia	University of Pennsylvania	J. H. Austin, M.D.	2 yrs.	18	4	Varies	$180
Philadelphia General Hospital, Philadelphia [a]	Pennsylvania State College	J. H. Clark, M.D.	2 yrs.	12	8	Varies	None
Presbyterian Hospital, Philadelphia	University of Pennsylvania	R. P. Custer, M. D.	2 yrs.	18	3	.....	$150
St. Agnes Hospital, Philadelphia		J. Stasney, M.D.	2 yrs.	12	6	Quarterly	B
St. Joseph's Hospital, Philadelphia [a]		J. Stasney, M.D.	2 yrs.	12	4	FebSept	$130B
Temple University Hospital, Philadelphia [a]	Temple University [b]	K. H. Valentine, M.D.	2 yrs.	21	20	JulySept	$100
Montefiore Hospital, Pittsburgh [a]		K. Y. Yardumian, M.D.	2 yrs.	12	8	Varies	$100R
Pottsville Hospital, Pottsville [a]		R. E. Hobbs, M.D.	2 yrs.	12	3	Varies	None

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APPROVED SCHOOLS FOR MEDICAL TECHNOLOGISTS—Continued

Name and Location of School	College Affiliation	Pathologist in Charge	Minimum Pre-requisite College	Length of Training in Months	Maximum Enrollment	Classes Begin	Tuition
PENNSYLVANIA—Continued							
Community General Hospital, Reading [a]		H. S. Cook, M.D.	2 yrs.	18	2	Varies	None
Reading Hospital, Reading	Albright College [b]	W. P. Jennings, M.D.	2 yrs.	12	4	Sept	$150
St. Joseph's Hospital, Reading		G. P. Desjardins, M.D.	2 yrs.	12	4	Varies	$150
Robert Packer Hospital, Sayre [a]	Elmira College for Women	C. H. DeWan, M.D.	2 yrs.	12	3	July	None
Moses Taylor Hospital, Scranton		C. L. Mattas, M.D.	2 yrs.	12	4	July Sept	None
Scranton State Hospital, Scranton [a]		E. F. Swartz, M.D.	2 yrs.	18	5	Varies	None
Wilkes-Barre General Hospital, Wilkes-Barre [a]		C. R. Tuthill, M.D.	2 yrs.	12	4	Sept	B
Williamsport Hospital, Williamsport [a]	Bucknell University [b]	M. G. Colvin, M.D.	2 yrs.	12	3	Varies	None
SOUTH CAROLINA							
Medical College of the State of South Carolina, Charleston [a]		D. W. Ellis, M.D.	2 yrs.	15	20	Varies	B
SOUTH DAKOTA							
McKennan Hospital, Sioux Falls [a]	University of South Dakota [b]	E. Pekelis, M.D.	2 yrs.	12	4	Feb Sept	$70B
Sioux Valley Hospital, Sioux Falls [a]	University of South Dakota [b]	A. M. Harris, M.D.	2 yrs.	12	8	Sept	$70B
Sacred Heart Hospital, Yankton	University of South Dakota	J. C. Ohlmacher, M.D.	2 yrs.	12	4		$84B
TENNESSEE							
Knoxville General Hospital, Knoxville		R. H. Monger, M.D.	2 yrs.	12	4	Jan July	B
John Gaston Hospital, Memphis [a]	Univ. of Tennessee Coll. of Med. [b]	D. H. Sprunt, M.D.	2 yrs.	15	8	Mar Sept	$258
Methodist Hospital, Memphis	Univ. of Tennessee Coll. of Med.	W. W. Tribby, M.D.	2 yrs.	24	7	Quarterly	$100
St. Joseph's Hospital, Memphis [a]		T. C. Moss, M.D.	2 yrs.	15	10	Quarterly	B
Geo. W. Hubbard Hospital, Nashville [a]	Tennessee A. & I. State College [b]	G. D. Holloway, M.D.	2 yrs.	24	12	Yearly	$280
Nashville General Hospital, Nashville [a]		W. A. DeMonbreun, M.D.	2 yrs.	12	5	Varies	None
TEXAS							
Brackenridge Hospital, Austin [a]		S. W. Bohls, M.D.	2 yrs.	12	2	Fall Spring	None
Hotel Dieu Hospital, Beaumont	Lamar College	E. D. Furey, M.D.	2 yrs.	18	4	Jan Sept	B
St. Therese Hospital, Beaumont [a]	Lamar Junior College	H. B. Williford, M.D.	2 yrs.	18	2	Feb Sept	B
Baylor University Hospital, Dallas	Baylor University [b]	J. M. Hill, M.D.	2 yrs.	13	18	Feb July	$100
St. Paul's Hospital, Dallas		J. L. Goforth, M.D.	2 yrs.	12	4		None
Harris Memorial Methodist Hosp., Ft. Worth [a]	Texas Christian University [b]	J. J. Andujar, M. D.	2 yrs.	12	10	Sept	
Terrell's Laboratories, Ft. Worth [a]	North Texas State Teachers College [b]	T. C. Terrell, M.D.	2 yrs.	12	5	Feb July	None
John Sealy Hospital, Galveston [a]	University of Texas School of Med.	W. C. Lenin, M.D.	2 yrs.	12	14	Monthly	$122B
Jefferson Davis Hospital, Houston [a]	University of Houston [b]	W. W. Coulter Sr., M.D.	2 yrs.	12	12	Monthly	$30
Methodist Hospital, Houston	Baylor University	H. Davenport Jr., M.D.	2 yrs.	12	4	Jan July	None
St. Joseph's Infirmary, Houston		S. Knittel, M.D.	2 yrs.	12	4	June Sept	None
St. Mary's Hospital, Port Arthur [a]	Northwestern State College [b]	H. B. Williford, M.D.	2 yrs.	12	4	June Sept	None
Med. and Surg. Memorial Hosp., San Antonio [a]		A. O. Severance, M.D.	2 yrs.	12	6	Varies	None
Santa Rosa Hospital, San Antonio		J. M. Moore, M.D.	2 yrs.	12	9	Quarterly	None
Scott and White Hospital, Temple		W. N. Powell, M.D.	2 yrs.	12	10	Varies	None
UTAH							
St. Benedict's Hospital, Ogden	Univ. of Utah; Loretto Heights Coll.	R. C. Ellis, M.D.	2 yrs.	12	4		$75B
Thomas D. Dee Memorial Hospital, Ogden [a]	University of Utah [b]	E. D. Zeman, M.D.	2 yrs.	12	4	Jan June	U
Dr. W. W. Groves Latter-Day Saints Hospital, Salt Lake City [a]		J. H. Carlquist, M.D.	2 yrs.	12	3	Jan July	None
Holy Cross Hospital, Salt Lake City [a]		C. McNeil, M.D.	Degree	12	4	July	None
St. Mark's Hospital, Salt Lake City [a]	Brigham Young University [b]	O. A. Ogilvie, M.D.	2 yrs.	12	4	June Sept	None
Salt Lake County Gen. Hosp., Salt Lake City [a]	University of Utah [b]	F. D. Gunn, M.D.	Degree	12	8	Varies	U
VERMONT							
University of Vermont College of Medicine, Burlington [a]	University of Vermont [b]	B. Pearson, M.D.	2 yrs.	15	8	Yearly	$117
VIRGINIA							
University of Virginia Hosp., Charlottesville [a]		W. E. Bray, M.D.	2 yrs.	12	12	Sept	B
DePaul Hospital, Norfolk [a]	Richmond Professional Institute [b]	A. F. Strauss, M.D.	2 yrs.	18	9	Quarterly	$60B
Norfolk General Hospital, Norfolk [a]		I. J. Motyca, M.D.	2 yrs.	15	5	Quarterly	$16B
Johnston Willis Hospital, Norfolk [a]		W. A. Shepherd, M.D.	2 yrs.	12	2		$100
Medical College of Virginia Hospital Division, Richmond	Medical College of Virginia	G. Z. Williams, M.D.	2 yrs.	16	16	Varies	$200B
Stuart Circle Hospital, Richmond	Richmond Professional Institute [b]	R. C. Beck, M.D.	2 yrs.	12	4	June Sept	B
WASHINGTON							
King County Hospital, Seattle		C. R. Jensen, M.D.	2 yrs.	12	8	Varies	None
Providence Hospital, Seattle	Seattle College [b]	D. G. Mason, M.D.	2 yrs.	12	4	Quarterly	B
Deaconess Hospital, Spokane [a]	University of Idaho [b]	G. A. C. Snyder, M.D.	2 yrs.	12	4	Varies	None
Sacred Heart Hospital, Spokane [a]		M. M. Patton, M.D.	2 yrs.	12	6	Mar July	None
St. Luke's Hospital, Spokane [a]	Univ. of Idaho [b]; Montana State Coll. [b]; State College of Washington [b]	O. O. Christianson, M.D.	2 yrs.	12	12	Feb Sept	$40
St. Joseph's Hospital, Tacoma [a]	Seattle College [b]	G. R. McCall, M.D.	2 yrs.	12	3	Feb Sept	None
Tacoma General Hospital, Tacoma [a]	Pacific Lutheran College [b]; College of Puget Sound [b]	C. P. Larson, M.D.	2 yrs.	12	6	Varies	None
WEST VIRGINIA							
School of Med., West Va. Univ., Morgantown [a]	West Virginia University [b]	W. G. Putschar, M.D.	3 yrs.	12	8	July Sept	$130B
Camden-Clark Memorial Hospital, Parkersburg	Mariette College	W. S. Dick, M.D.	2 yrs.	12	2		None
WISCONSIN							
St. Francis Hospital, LaCrosse		O. Kanner, M.D.	2 yrs.	12	6	Feb Sept	$100B
Madison General Hospital, Madison		L. McGary, M.D.	2 yrs.	12	5	October	None
St. Mary's Hospital, Madison [a]	Mount Mary College [b]	L. F. Beyer, M.D.	2 yrs.	12	10	Varies	B
State of Wisconsin General Hospital, Madison	University of Wisconsin [b]	W. D. Stovall, M.D.	3 yrs.	12	20	Varies	U
Columbia Hospital, Milwaukee	Marquette University [b]	G. Ritchie, M.D.	2 yrs.	18	6	Jan July	None
Milwaukee County Hospital, Milwaukee [a]	Marquette University [b]	J. F. Kuzma, M.D.	2 yrs.	24	8	June	None
Milwaukee Hospital, Milwaukee [a]		E. A. Birge, M.D.	2 yrs.	12	5	July	None
Mt. Sinai Hospital, Milwaukee [a]		N. Enzer, M.D.	2 yrs.	24	2	Varies	None
St. Joseph's Hospital, Milwaukee	Marquette University [b]	W. A. D. Anderson, M.D.	2 yrs.	18	6	June Oct	None
St. Mary's Hospital, Racine		G. A. Walker, M.D.	2 yrs.	12	2	Varies	$50
WYOMING							
Memorial Hospital, Cheyenne	University of Wyoming [b]	S. S. Zuckerman, M.D.	2 yrs.	12	6	Apr Sept	$175
PUERTO RICO							
School of Tropical Medicine, University of Puerto Rico, San Juan [a]	University of Puerto Rico [b]	O. C. Mandry, M.D.	Degree	12	20	August	$150B

a. Male students are admitted.
b. College credit received during hospital training.
1. Students enrolled in twenty-month course leading to M.S. degree obtain thirty-six quarter hours credit; entrance requirements—B.S. degree; tuition, $100. Students enrolled in twelve-month course are allowed six quarter hours credit and receive a certificate.
2. College credit allowed by each of the following affiliations: Albion College, Central Michigan College of Education, Michigan College of Mining and Technology, Michigan State College, University of Michigan, and Western Michigan College of Education.

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SATURDAY, AUGUST 14, 1948

EDITORIAL ANNOUNCEMENT

The compositors returned to work on Monday, June 28. This issue of THE JOURNAL has been prepared in part by the use of Vari-Typer machines.

HOSPITAL SERVICE IN THE UNITED STATES

Elsewhere in this issue is the 1947 hospital report of the Council on Medical Education and Hospitals which reveals an increase in hospital service during the past year in spite of a decrease in total bed capacity. For all registered hospitals the bed capacity decreased in 1947 to 1,425,222 from 1,468,714 in 1946; the average daily census also decreased from 1,239,454 to 1,217,229 during the same period. However, the number of patients admitted increased from 15,153,452 in 1946 to 15,829,514 in 1947. This apparent discrepancy is clarified when the average length of stay per patient in general hospitals is considered. In 1946 the average patient remained 12.9 days in a general hospital; in 1947 he was discharged after 11.4 days, a gain to the patient of a day and a half. The decrease in total bed capacity is accounted for entirely in the governmental group, federal hospitals alone reporting 51,282 beds less than last year. Nongovernmental hospitals, on the other hand, increased their number of beds by 9,037. With admissions to the governmental hospitals decreasing by nearly 394,000, admissions to civilian hospitals increased by over 1,000,000 for the second consecutive year. Births in hospitals registered by the American Medical Association passed the two million mark for the first time in 1946; during the current reporting period, births in these hospitals reached the still higher figure of 2,837,139.

The increase in the number of admissions was noted in all types of hospitals, with the exception of tuberculosis hospitals, convalescent hospitals and those classified as "institutions." Admissions to tuberculosis sanatoriums remained quite constant, with 99,741 admitted in 1946 and 99,080 in 1947. General hospitals contributed the largest share of the increased admissions, adding more than 600,000 to the previous year's figures; furthermore, 97 per cent of the births reported occurred in general hospitals.

Hospitals for nervous and mental diseases still account for more than half of the number of patients occupying hospital beds; in 1947, of an average census of 1,217,229 patients, 53.5 per cent were in hospitals of this type. General hospitals contributed 37.5 per cent of the total, while all other hospitals and related institutions made up the remaining 9 per cent. Beds in neuropsychiatric hospitals increased by about 6,000, while the capacity in general hospitals decreased by about 50,000.

It could perhaps have been anticipated that the percentage of beds occupied would rise; a slight increase, 1 per cent, was reported for all types. In the general hospital group, however, to which 92 per cent of patients was admitted, an actual decrease occurred, from 80.6 per cent in 1946 to 78.9 per cent in 1947. The over-all figure of 85.4 per cent occupancy for all hospitals represents an upper limit beyond which efficient administration would seem improbable. A safety factor of 15 per cent vacancy is considered minimal for expeditious handling of the patient load; a lower margin would undoubtedly mean protracted delays and lessened efficiency in admissions and patient control.

While the primary purpose of the modern hospital is to provide adequate facilities for the care and treatment of the sick, an increasingly important function is the hospital's role as an educational institution. The magnitude of the teaching program is evident in the number of hospitals offering training; 807 hospitals, primarily general, have approved intern programs, and 1,102 are approved for residency training. Nursing schools now number 1,212, with an additional 193 offering affiliating courses only. There are currently 12 technical schools approved for training medical record librarians, 25 schools for training technicians in physical therapy, 25 for technicians in occupational therapy, 211 schools for x-ray technicians and 337 engaged in training medical technologists. The conduct of these programs for training physicians, nurses and technical personnel involves a considerable expenditure of funds and a great many hours of time and effort from the hospitals participating. Nevertheless, the continued cooperation of these hospitals is essential in providing trained personnel to meet the ever increasing demand for more and better professional service.

INTERNSHIPS AND RESIDENCIES

Data published in the Internship and Residency Number of THE JOURNAL, May 1, make it apparent that the point is being reached in graduate training beyond which further expansion of facilities is probably not desirable. In hospitals approved for intern training, the number of positions available already

exceed the number of applicants by 30 per cent. More than 12 per cent of approved hospitals were unable to fill any of their positions during the past year, with an additional 13 per cent having less than half the number of interns desired. Hospitals now approved for residency training are well able to accommodate future graduates, in most, if not all, of the specialties. While the number of approved residencies has increased threefold since prewar years, the number of applicants apparently is gradually decreasing. The majority of physicians who sought residencies after their release from military service have completed their training or will do so during the next year. Furthermore, the interest in specialty training among medical students is believed to be lessening. Can it then be assumed that the saturation point in training facilities of this type has been reached and that a further increase will probably result in the same problems now confronting hospitals approved for intern training?

The Council on Medical Education and Hospitals believes that approval should be extended to any hospital able to meet its educational requirements without any attempt to limit the number so designated; however, the responsibility of the Council to graduate physicians accepting appointments in approved hospitals requires critical evaluation in approving new hospitals and in reviewing those previously approved. Reevaluation of these programs has been accomplished in several of the specialties, in collaboration with the American Boards, and at an early date it will be done with the other specialties as well as in the intern field. Some hospitals where the survey revealed that the type of training had fallen below the required standard have completely reorganized their teaching programs; some have affiliated with other hospitals offering a more complete plan of training, and some programs have been discontinued. Similar changes probably will be made in the other residency fields and in hospitals approved for intern training.

Under the exigencies of the war period, ideal standards could not be maintained. However, those mitigating circumstances no longer exist and hospitals should have been able, by this time, to develop educational programs in accordance with acceptable standards. Those which fail to meet such requirements will not be able to attract their quota of interns or residents and will require reevaluation. Adequacy of supervision, qualifications of the house staff, adequacy of clinical material and sufficient necropsy material are basic criteria and cannot be overlooked in considering a hospital's ability to carry out an intern or residency program.

At this point, hospitals expecting to attract applicants and maintain an approved status must have reconverted to justify continued participation in training the future physician.

Current Comment

TECHNICAL PERSONNEL

The need for more technical personnel in hospitals, clinics and physicians' offices continues and in some quarters has been termed "critical." The relation between the number of admissions to hospitals and the requirement for full time trained technicians has been demonstrated by statistical comparison. Most hospitals, and many with greatly increased facilities through new construction, are operating at capacity. The present general tendency toward shorter periods of convalescence in hospitals has permitted a greater turnover of patients than in the past. Progressive advances in therapy, new methods of treatment and rehabilitation have created new demands for technical personnel. These demands have been further augmented by the increased needs of government hospitals, particularly those of the Veterans Administration. Federal agencies that are interested in maintaining adequate standards in the training of technical personnel share the general concern over the shortages and are actively engaged in measures designed to increase enrolment and encourage the development of new schools. The number of technical schools approved by the Council on Medical Education and Hospitals and the number of graduates from these schools have increased each year, but are still insufficient to meet current needs. The present lists of approved technical schools include seven new schools of occupational therapy, forty-four schools for clinical laboratory technicians and fifty new schools for x-ray technicians. Schools for physical therapists and for medical record librarians have not increased proportionately. The solution of the problem lies in increasing enrolment in presently approved schools to acceptable capacity and in the development of new schools by those universities, colleges and hospitals that can provide adequate facilities and qualified teaching personnel. These should be developed in accordance with the essentials for approval as outlined by the Council on Medical Education and Hospitals.

AGAIN THOSE SELECTIVE SERVICE STATISTICS

The report of the Brookings Institution on compulsory health insurance concludes that ". . . [Selective Service statistics] are unreliable as a measure of the health of the nation and cannot be used to show the extent of the medical needs of the country as a whole." This conclusion is based on certain characteristics of the draft data previously noted by Dr. Maurice H. Friedman in his testimony before the Senate Committee on Labor and Public Welfare. The arguments presented in the Brookings report are undeniably valid when applied to rejection rates; possibly data on the prevalence of recorded defects may be of some value as a guide to improvement if used with caution. In the May 1948 issue of the *Connecticut Health Bulletin*, William Haenszel and Edwin T. Tracy of the Bureau of Vital Statistics use Selective Service prevalence rates as a basis for estimating the incidence

of certain defects in Connecticut. The Selective Service medical statistics bulletins do not contain data on prevalence of recorded defects by states; consequently, the prevalence rates for Connecticut were calculated by adjusting the national prevalence by the ratio of rejections reported for the nation and the state. The validity of this procedure rests on the assumption that the national rejection-prevalence index holds for the state, which would not be true if standards or the application of standards varied in different areas. National-state rejection ratios were computed for the period April 1942-December 1943; national prevalence rates for the same period were used except in the case of minor defects which were more completely recorded from November 1940 to September 1941. In 2 cases the resulting estimates of the incidence of defects among white men aged 20 to 34 in Connecticut could be checked against corresponding data from other sources. The method used in the article yielded a rate of 6.6 per thousand for syphilis as compared to 6.1 reported by the United States Public Health Service, while the estimated tuberculosis rate of 10.5 was in close agreement with the results of studies by the Tuberculosis Commission. Connecticut draftees were apparently above the national averages as to eyes, teeth and tuberculosis but inferior specimens of young manhood as to mental diseases and possibly ear defects. Although the apparent accuracy of two estimates does not establish the validity of their method, Haenszel and Tracy recommend their tables for use by public health workers in Connecticut pending the publication of more precise data. They suggest that the utility of selective service material could be increased by the inclusion of data on the incidence of defects by states, the revision of figures to relate to individuals rather than to examinations and an exposition of changes in procedures and standards and their effects on rejection and prevalence rates. If these suggestions were followed and if the data were used with an awareness of their limitations, Selective Service statistics might yet prove to be of practical as well as propaganda value.

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CALCIUM-ENRICHED MEAT

McQuarrie and associates [1] of the University of Minnesota, compared the nutritional value of calcium-enriched ground beef with that of milk from the point of view of utilization of calcium, phosphorus and protein. By various additions the two diets were adjusted to contain the same quantities of protein, fat, carbohydrate, water, calcium, phosphorus and vitamins. Young litter-mate rats about 35 days of age were divided into two dietary groups, one receiving milk, the other cooked lean meat enriched with calcium gluconate and phosphates. The animals were maintained on these diets for six weeks. At the end of this period the animals were decapitated twenty-four hours after all food had been removed from their cages. Pooled blood samples were analyzed for calcium, phosphorus and serum protein. The femurs of half of the rats were weighed and analyzed. The entire carcass of each of the remaining rats was analyzed for calcium, phosphorus and total fat-free dry weight. The serum protein, calcium and phosphorus levels at the end of the experiment did not show significant differences attributable to differences in diet. All values were well within normal range. The data thus indicate clearly that the calcium-supplemented meat diet to supply calcium, phosphorus and protein was as good as milk. This conclusion was confirmed on 2 hospital patients, aged 12 and 14 years, who were placed on a milk-containing diet for fifteen days followed by a calcium-enriched meat diet for a similar period of time.

1. McQuarrie, I.; Ziegler, M., and Moore, I. H.: Proc. Soc. Exper. Biol. & Med. **65**: 120, 1947.

RAW VERSUS AUTOCLAVED SOY BEAN PROTEIN

In 1917 Osborne and Mendel [1] noted that rats fed raw soy bean flour grew more slowly than control rats fed the same flour after autoclaving. Subsequently, Ham and Sandstedt [2] offered an explanation for this nutritional difference, in their isolation of a trypsin-inhibiting substance from unheated soy bean flour. They found that this trypsin inhibitor had a retarding effect on the normal growth of chicks, presumably by reducing proteolytic activity in the small intestines. Bowman [3] demonstrated its in vitro inhibition on tryptic digestion of casein: Kunitz [4] afterward succeeded in isolating the soy bean tryptic inhibitor in crystalline form. Because of the widespread use of soy bean flour as human food, Lewis and Taylor [5] of the department of medicine, Harvard University, have compared the utilization of raw and autoclaved soy bean flours in man. Two cooperative and well-nourished patients were selected. Both were allowed unrestricted activity about the wards. Their caloric requirements were estimated at 2,500 calories. A basic diet was therefore planned to afford 2,500 calories daily. This diet provided a low protein intake of 25 Gm. from mixed sources.

After an initial period of eight days during which the subjects received only the basic diet, 188 Gm. of raw soy bean flour containing 75 Gm. of protein was substituted for an equal caloric value of carbohydrate in the basic diet. After a nine day period on raw soy bean flour the subjects were returned to the basic diet for six days. This was followed by another nine day period during which the subjects received 188 Gm. of soy bean flour previously autoclaved for one hour at 15 pounds pressure. Nitrogen balance and body weights were followed throughout the study. The average daily nitrogen retention of the 2 patients was 5.4 Gm. on the raw soy bean flour and 6.95 Gm. on the autoclaved flour. This indicates a 20 per cent nutritional superiority for the autoclaved material. The 2 patients showed an average daily stool nitrogen of 1.45 Gm. during both periods. The difference in the nutritional value of the raw and autoclaved material is therefore apparently not due to a difference in tryptic digestibility (trypsin inhibitor), but is presumably due to a difference in the metabolic availability of the resulting digestive products.

1. Osborne, T. B., and Mendel, L. B.: J. Biol. Chem. **32**: 369, 1917.
2. Ham, W. E., and Sandstedt, R. M.: J. Biol. Chem. **154**: 505, 1944.
3. Bowman, D. E.: Proc. Soc. Exper. Biol. & Med. **57**: 139, 1944.
4. Kunitz, M.: J. Gen. Physiol. **29**: 149, 1946.
5. Lewis, J. H., and Taylor, T. H. L.: Proc. Soc. Exper. Biol. & Med. **64**: 85, 1947.

ORGANIZATION SECTION

Official Notes

NOTES ON THE SIXTH SEMIANNUAL MEETING OF THE MIDDLE ATLANTIC STATES REGIONAL CONFERENCE ON MEDICAL SERVICE

Organized about three years ago as a permanent unit in the conference program of the Council on Medical Service of the American Medical Association, the Middle Atlantic states group has met twice each year. The officers are: Dr. Francis F. Borzell, chairman, Philadelphia; Dr. Frederic J. Quigley, vice chairman, Union City, N. J.; and Dr. William Bates, secretary-treasurer, Philadelphia.

The sixth session was devoted primarily to the discussion of two topics: (1) the relationship between medical care plans and the Blue Cross and (2) the problem of developing county health units. In addition, Dr. James C. Sargent, of Milwaukee, spoke on the subject of National Emergency Medical Service, and Dr. Joseph S. Lawrence, Director of the Council on Medical Service, Washington Office, talked on the "Washington Horoscope."

The relationship between medical care plans and Blue Cross was presented by L. Howard Schriver, M.D., president, Associated Medical Care Plans, and E. A. Van Steenwyk, executive director of the Hospital Service of Philadelphia. Dr. Elmer Hess, member of the American Medical Association Council on Medical Service and president of the Medical Society of the State of Pennsylvania, led the discussion. Dr. Schriver outlined the creation of Associated Medical Care Plans and its functions and the recent developments in the field of joint cooperation between this organization and the Blue Cross. He presented the following common problems that exist for both groups and which should be one of the functions of any agency or national association evolving from this cooperation: (1) public relations, (2) advertising, (3) actuarial services, (4) enrolment, (*a*) reciprocity of contract coverage to subscribers, (*b*) transfer technic, (*c*) uniformity of basic contract features and (*d*) national employer enrolment and (5) assistance to member plans in any other capacity.

Mr. Van Steenwyk spoke of the teamwork necessary to satisfy the public and emphasized the need for bringing both medical and hospital programs together. In regard to developing team play, he suggested: (1) a single rate to employers for employees wherever employed, (2) standard administrative regulations, (3) a device which will provide similar coverage everywhere, (4) the need for a single agency through which employers may transact all business, (5) a device for providing standard benefits and (6) uniformity of public relations activities.

In opening the discussion, Dr. Hess pointed out that the first duty is to the American people and the second duty is to provide adequate medical care at a price that they can afford. Without the medical profession no adequate medical program is possible. He further pointed out that any general basic changes in policy covering medical care plans should have the approval of the American Medical Association Council on Medical Service before they are adopted.

A representative from each state was then called on to present his ideas on the subject.

Dr. Erval Coffey, medical director of the United States Public Health Service, opened the discussion on developing county health units. He stressed the idea that if local health units were properly organized the federal government would have no reason for many of its public health activities. Five basic reasons were given for the slow progress in developing county health units: (1) lack of medical personnel, (2) lack of qualified auxiliary personnel, (3) lack of incentive in this type of work, (4) lack of encouragement by medical schools and (5) lack of legislation.

Dr. James C. Sargent told of the activities of the American Medical Association Council on National Emergency Medical Service and the problems with which the Council must cope. He outlined the arguments against the drafting of physicians and urged state and county medical societies to activate at once a program for the civilian population to operate in the event of disaster.

In presenting the "Washington Horoscope," Dr. Lawrence selected a number of bills of interest to the medical profession and told of their present status.

Washington Letter

(From a Special Correspondent)

Aug. 11, 1948.

Report on Physiologic Studies

The Office of the Air Surgeon, U. S. Air Force, has received a report on the first nine months' operation of a special mission sent to Alaska last September to conduct studies on effects of cold weather on physiologic function. Colonel Jack Bollerud, who headed the expedition, based near Fairbanks, presented the report. Twenty-two enlisted men and seven officers, four of whom were physicians or allied scientists, made up the expedition. One of the group's findings was that during January the cold pressor response to immersion of the hand in ice water is reduced to only a slight blood pressure elevation, while in May it returns to two thirds of the elevation experienced at subtropical Randolph Field. Normal heat loss of the hand through conduction and radiation, as measured by a hand calorimeter, decreases appreciably in winter, it was found.

Civil Service Issues New Call for Physicians

The U. S. Civil Service Commission has broadcast a new call for medical officers, who are needed to fill positions in all sections of the United States. Vacancies exist in the Panama Canal Service, Indian Service, Department of the Army, Public Health Service, Veterans Administration, Civil Aeronautics Administration, Railroad Retirement Board, Children's Bureau and miscellaneous federal agencies. Entering salaries range from $4,479 to $6,235 per annum. Application forms are obtainable at first and second class postoffices and regional offices of the Civil Service Commission, as well as at Commission headquarters in Washington.

Certification of Specialists in Preventive Medicine

Medical officers of the Army, Navy and Public Health Service who believe that they can qualify as specialists in preventive medicine are now being invited to submit their applications to Dr. E. L. Stebbins, chairman, Interim Board of Preventive Medicine, % Division of Research Grants and Fellowships, National Institutes of Health, Bethesda, Md. The Interim Board is a step toward what the three services hope will be ultimate establishment of an American Board of Preventive Medicine.

Army Medical Department Marks 173rd Birthday

Professional and economic attractions of a military medical career are greater today than ever before, Army Surgeon General Raymond W. Bliss asserted on the occasion of the Army Medical Department's one hundred and seventy-third birthday anniversary July 27. Its burden increased by reenactment of Selective Service, the department will require 3,900 more volunteer medical officers by June 30, 1949, said Gen. Bliss. Foremost among professional inducements, he declared, are the opportunities now offered to Army physicians to take graduate training toward specialty certification.

Dr. Walter Bauer in Charge of Rheumatic Disease Survey

Dr. Walter Bauer, of Boston, has been appointed head of a committee which will undertake to survey research which is being conducted in arthritis and other rheumatic diseases. The announcement was made by Dr. Lewis Weed, chairman of the National Research Council's Division of Medical Sciences, which was asked by the American Rheumatism Association to sponsor the survey.

GOVERNMENT SERVICES

SECRETARY OF DEFENSE

INTEGRATION OF PANAMA CANAL ZONE HOSPITAL SERVICES

On recommendation of the Committee on Medical and Hospital Services of the Armed Forces, Secretary of Defense James Forrestal has approved integration of National Military Establishment hospital and medical services in the Panama Canal Zone area. By this action, hospitalization of the personnel of all three services on the Atlantic side of the Canal Zone is assigned to the Navy, while on the Pacific side hospitalization for all three services is assigned to the Army. One of the two hospitals heretofore maintained by the Army for its military personnel will be closed, together with one of three now caring for civilians employed on the Canal. Better common use of the medical staffs of the three services also will be made by establishing a Panama Area Joint Medical Advisory Committee composed of representatives of the three armed forces and of the Panama Canal Administration Medical Service. The chairman will serve as medical director on the staff of the Commander-in-Chief, Caribbean Command. Under the plan, use will be made of medical experts of any service for special duty in any medical activity where their skills are needed temporarily.

The two hospitals to be closed are the Fort Gulick (Army) and the Margarita (Panama Canal Administration) hospitals, both on the Atlantic side. The Fort Gulick Hospital will be used solely as a dispensary. The Margarita Hospital will be closed and retained in a maintenance status.

The Gorgas Hospital at Balboa will continue to be operated by the Panama Canal Administration to hospitalize and provide outpatient service on the Pacific side for civilian employees of the Panama Canal and the Panama Railroad, and other civilians for whom medical treatment is authorized by law, regulation or treaty. About 70,000 civilian workers other than employees of the military establishment, together with their dependents, are entitled by contract to medical services and hospitalization. In addition, treaty obligations admit citizens of certain South and Central American countries to the Gorgas Hospital, which will continue to provide specialized clinical pathology and central laboratory facilities and services beyond the scope of the other medical installations in the Canal Zone, together with specialized consultative, diagnostic and treatment services for special cases.

The Committee on Medical and Hospital Services, of which Dr. Paul R. Hawley, formerly Chief Medical Officer of the Veterans Administration, is chairman, was appointed by Secretary Forrestal to make a study of these services with recommendations for coordination, efficiency and economy. In addition to Dr. Hawley, the members of the committee are Major General Raymond W. Bliss, Surgeon General of the Army; Rear Admiral Clifford A. Swanson, Surgeon General of the Navy, and Major General Malcolm C. Grow, the Air Surgeon. Rear Admiral Joel T. Boone is executive secretary of the committee.

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ARMY

CONSULTANTS ARRIVE IN VIENNA

Headquarters, United States Forces in Austria, report that the sixth group of civilian consultants to the Surgeon General of the Army was scheduled to arrive in Vienna July 10 for a tour of medical installations throughout the European command. The consultants in the group are: Drs. Garfield G. Duncan, Philadelphia (internal medicine); R. A. Stiefel, Battle Creek, Mich. (surgery); A. James French, Kansas City, Mo. (pathology); Thomas N. Leonard, Washington, D. C. (obstetrics and gynecology), and Sydney G. Margolin, New York (neuropsychiatry). Among other places, they were to visit the 110th Station Hospital to examine unusual cases and assist in advanced training of the younger medical officers. They were scheduled to leave Salzburg July 13 to continue the tour.

RETIREMENT PROVISION FOR RESERVE OFFICERS

The 80th Congress passed a law, which was signed by the President, providing that reserve officers of any of the armed forces who have completed twenty or more years of acceptable membership may retire with benefits after they reach the age of 60 years, the retirement pay being computed at 2½ per cent of base pay for the highest rank held multiplied by the number of years on active duty, plus 0.5 per cent of the same base pay multiplied by the number of years on inactive status. These provisions may amount to as much as 75 per cent of the highest active duty pay drawn by the person receiving the allowances.

MEDICAL MEETING IN KOREA

At the regular monthly meeting of Army medical officers in Korea June 25 at the 382d Station Hospital, Lieut. Merrit F. Garland read a paper on anesthesia in emergency surgery and Lieut. Douglas MacInnis read a paper on "Acute Injuries of the Knee." Captain Mary Murphy of the Army Nurse Corps discussed the graduate courses recently given Korean nurses, and Chaplain Richard W. Jungfer discussed the role of the hospital chaplain in present day hospital care. During the afternoon the seventy-five Medical Department officers and twenty civilian doctors and nurses present held departmental conferences and made ward rounds discussing cases and diagnostic problems. A buffet supper and social meeting was held at the Officers' Club.

SELECTED FOR POSTGRADUATE TRAINING

The Surgeon General announces that the University of California Medical School has accepted Col. Lawrence C. Ball for a course in anatomy starting August 1 and that Capt. Irvin C. Plough has been accepted as a resident in internal medicine at the Goldwater Memorial Hospital, Welfare Island, New York. The following medical officers have been selected to pursue a course of training in orthoptics at George Washington University Medical School, Washington, D. C.: Cols. W. F. Cook, John B. Coates Jr. and Austin Lowrey Jr.; Lieut. Cols. Forrest E. Hull and Robert Lehman; Majors Francis W. Lanard and John J. Maloney; Capt. Joseph J. G. Gulyach, and First Lieuts. Stephen S. Eganbati, Harry W. Gray, Henry F. Jacobius, John B. Marley, Allen G. Thomas and Arnold Topilow.

ALLOCATE ARMY HOSPITAL BEDS FOR VETERANS

The Surgeon General has announced that 3,305 beds in Army hospitals throughout the United States have been allocated at the request of the Veterans Administration for the treatment of veterans, 325 of which were set aside specifically for cases of tuberculosis at Fitzsimmons General Hospital in Denver.

NAVY

OFFICERS APPROVED FOR POSTGRADUATE TRAINING

The Advisory Board of the Bureau of Medicine and Surgery has nominated the following medical officers for postgraduate training:

Comdr. Harry B. Eisberg: One year additional training in Orthopedic Surgery, Naval Hospital, Bethesda, Md.

Comdr. Rodney R. Gleysteen: Course in Public Health (Tropical Medicine), Johns Hopkins University School of Hygiene and Public Health.

Comdr. Leo W. Olechowski: Fellowship in Surgery, Northwestern University (Cook County Hospital).

Lieut. William W. Miller Jr.: Residency in Urology, Naval Hospital, Bethesda, Md.

Lieut. Donald R. Davis: Residency in Obstetrics and Gynecology, Naval Hospital, Oakland, Calif.

Lieut. (jg) Paul K. Hamilton: Residency in Pathology, Naval Hospital, San Diego, Calif.

Lieut. (jg) Robert L. Hill: Residency in Internal Medicine, Naval Hospital, Long Beach, Calif.

Lieut. (jg) Robert C. Kessler: Residency in General Practice, Naval Hospital, Portsmouth, Va.

Lieut. (jg) George J. Taylor, III: Residency in Obstetrics and Gynecology, Naval Hospital, San Diego, Calif.

NEW REGULAR OFFICERS

Lieutenants (jg) William F. Bennett Jr., of Columbus, Ga., George M. Rugtiv of Estherville, Iowa, and William K. Woodard of Hollis, N. H., have transferred to the Regular Corps of the Navy from an active reserve status. All three were graduates of the Navy V-12 training program.

Lieutenants (jg) Robert H. Lanfersieck of Sidney, Ohio, and John P. Rynd of Westfield, N. Y., have reported for active duty in the Medical Corps Reserve.

Commander Berger Thomas of Columbus, Ohio, and Lieutenant (jg) Frank D. Fuller of Reno, Nev., have reported for active duty from an inactive reserve status.

Commander Marcos A. Godinez and Lieut. Commander John R. Bierley, both of Puerto Rico, have joined the Medical Corps of the Regular Navy and been ordered to the Naval Station at San Juan for duty.

NEW NAVY INTERNS

The following men are newly accepted interns in the grade of lieutenant (jg) in the Medical Corps of the Navy: Walter J. Berger Jr., Madison, Wis.; George V. Branigan Jr., Glen Rock, N. J.; Carl A. Broaddus Jr., Newton, Va.; Louis F. Brignac Jr., Bogalusa, La.; Richard J. Broggi, Chelsea, Mass.; Kendall W. Caldwell, Philadelphia; Harry H. Dinsmore, Barnesboro, Pa.; George F. Elsasser Jr., Portsmouth, Va.; Warren C. Evans, Norfolk, Va.; Andrew W. Gibbons, Syracuse, N. Y.; George S. Haas, Los Angeles; Richard W. Heffner, Beaver Dam, Wis.; Philip P. James, Hampton, Va.; Erwin M. Janzen, Louisville, Ky.; J. W. Johnson, Ridgefarm, Ill.; Hoyt Kirkpatrick, Arlington, Va.; Robert N. Maurer, Teaneck, N. J.; John P. McNally, Philadelphia; Norman K. Noordhoff, Chico, Calif.; Donald J. Perry, Houston, Texas; Maurie D. Pressman, Philadelphia; Don C. Rudeen, Los Angeles; William R. Stackable, Chicago; Benjamin C. Stigall, Louisville, Ky.; Charles C. Strong, Chehalis, Wash.; William E. Taylor, Pomeroy, Iowa, and Samuel E. Trueblood, Oswego, Ore.

ASSIGNMENT OF RESIDENTS

The following medical officers have been nominated for the residency training as indicated:

Comdr. John W. Albrittain, LaPlata, Md., dermatology and syphilology, at Naval Hospital, St. Albans, N. Y.

Comdr. Clement D. Burroughs, Little Rock, Ark., ophthalmology, Naval Hospital, San Diego, Calif.

Comdr. Henry J. Hunter, Oil City, Pa., obstetrics and gynecology, Boston Lying-in Hospital and the Free Hospital for Women, Brookline, Mass.

Lieut. Chester M. Lessenden Jr., Lawrence, Kan., dermatology and syphilology, Naval Hospital, St. Albans, N. Y.

Lieut. (jg) Leland C. Brannon, Piedmont, Calif., surgery, Naval Hospital, Long Beach, Calif.

Lieut. (jg) Byron T. Eberly, Lancaster, Pa., otolaryngology, Naval Hospital, Philadelphia.

Lieut. (jg) Robert J. Fleischaker, Pittsburg, Kan., surgery, Naval Hospital, Chelsea, Mass.

Lieut. (jg) Carl N. Haggard, Oakdale, La., pediatrics, Naval Hospital, Philadelphia.

Lieut. (jg) Paul K. Hamilton Jr., Birmingham, Ala., pathology, Naval Medical Center, Bethesda, Md.

Lieut. (jg) Andrew M. Margileth, Cincinnati, Ohio, pediatrics, Naval Hospital, Chelsea, Mass.

Lieut. (jg) Robert E. Walsh, Elmira, N. Y., anesthesia, Naval Hospital, St. Albans, N. Y.

Lieut. (jg) Alan D. Watson, Kent, Conn., dermatology and syphilology, Naval Hospital, St. Albans, N. Y.

Lieut. (jg) Robert G. Williams Jr., Wenonah, N. J., internal medicine, Naval Medical Center, Bethesda, Md.

VETERANS ADMINISTRATION

FOLLOW-UP PROGRAM FOR TUBERCULOSIS CASES

The Veterans Administration has established a comprehensive follow-up program to prolong the effects of hospital treatment of veterans suffering from tuberculosis, of whom there are now more than 13,000 under the care of Veterans Administration, while a total of 80,763 veterans are receiving compensation or pensions for tuberculosis. The new follow-up program is designed to discover early any relapses among the tuberculous patients so that further treatment may be started promptly. Each veteran-patient before discharge from the hospital will be advised what to do to assist in keeping the disease under control, and he will be urged to report at regular intervals for sputum examinations and roentgen or other necessary studies. While veterans with service-connected tuberculosis can be handled in the outpatient departments of Veterans Administration offices or hospitals, they may obtain the services of qualified physicians or recognized institutions near their homes for this follow-up care if authorized to do so beforehand by the Veterans Administration.

PERSONAL

Dr. C. B. Spruit of the headquarters office in Washington was recently awarded the honorary degree as doctor of science by Illinois College, Jacksonville, Ill., where he was graduated; he later went to Harvard University Medical School. During World War II Dr. Spruit was deputy to the chief surgeon of the European Theater of Operations, Major General Paul R. Hawley. He was retired from the Army Medical Corps with the rank of brigadier general in 1946 after thirty years of service.

Dr. Karl Menninger has resigned as manager of the Veterans Administration hospital at Topeka to become chairman of the dean's committee and senior consultant to the hospital. His successor is Dr. Frank Casey, who has been chief of professional services at the Topeka hospital since 1946.

Dr. Glenn Drewyer, formerly of Bay City, Mich., has joined the staff of the Veterans Administration hospital at St. Petersburg, Fla. Dr. Drewyer served four years in the Navy in World War II and formerly was medical director of the Glenwood Hot Springs Clinic, Glenwood Springs, Colo.

NEW STAFF MEMBERS AT ROCHESTER

The following nine physicians recently joined the staff at the recently enlarged Veterans Administration Clinic in Rochester, N. Y.: Harry S. Wieder, Louis N. Kerstein, Hans Neuberg, Louis Singer, James J. Clements, William Libertson, Robert A. Wise, William R. Webster and Jacob Sirkin. Dr. Stephen Mayka resigned from the staff of the clinic June 30 to accept a fellowship at the Strong Memorial Hospital, Rochester.

Medical News

(Physicians will confer a favor by sending for this department items of news of general interest: such as relate to society activities, new hospitals, education and public health. Programs should be received at least two weeks before the date of meeting.)

DISTRICT OF COLUMBIA

Grant to Aid Patients With Intractable Asthma.—The George Washington University Hospital has received a grant from the Marcelle Fleischmann Foundation, Baltimore, for $1,000 to hospitalize patients with intractable asthma. Persons suffering from this type of asthma may apply to the George Washington University Hospital, Department of Surgery.

Cancer Research.—The American Cancer Society has granted $50,000 to George Washington University for cancer research through the Warwick Memorial. The Warwick Memorial earlier this year established a cancer detection clinic at the new George Washington University Hospital and research facilities. The $50,000 gift will be used to augment research activities.

ILLINOIS

Short Courses on Poliomyelitis.—The Illinois State Department of Public Health announces that physicians, nurses and physical therapists of Illinois are eligible for admission to the short courses in poliomyelitis being offered at the City Hospital in Cleveland during August and September. These courses, which are sponsored by the National Foundation for Infantile Paralysis, consist of lectures, demonstrations, conferences, discussions and practical applications. Two ten day courses are open for physicians; one began August 2, and another will start August 30. The courses for nurses and physical therapists, which are of two weeks' duration, open August 3 and September 13. There is no fee for the courses. Applications should be addressed to Dr. John A. Toomey, Department of Contagious Diseases, City Hospital, Cleveland, or to the National Foundation for Infantile Paralysis, 120 Broadway, New York.

X-Ray Unit Available at State Fairs.—A mobile x-ray unit from the state department of public health will be available at a number of county fairs in Illinois this summer and at the state fair in Springfield, August 13-22. The unit will be at the following county fairs: Adams County, Mendon, August 9-12; Brown County, Mt. Sterling, August 3-6; Oblong, Crawford County, September 6-10; Augusta Community Fair, August 31-September 3; Henderson County, Stronghurst, August 17-20; Knox County, Knoxville, August 10-13. Any person attending the fair may receive a roentgenogram of the chest. This service is part of the tuberculosis case-finding program conducted by the division of tuberculosis control in its effort to detect tuberculosis in its early stages. The film is later developed, interpreted, and the results sent in a confidential report to the person and his physician. Dr. Clifton F. Hall, Springfield, chief of the division of tuberculosis control, points out that tuberculosis remains one of the leading causes of death in Illinois.

Chicago

Dr. Knisely Awarded Alvarenga Prize.—In recognition of his studies on "Sludged Blood" the College of Physicians of Philadelphia on July 14 awarded the Alvarenga Prize for 1948 to Melvin H. Knisely, Ph.D., associate professor of anatomy, University of Chicago School of Medicine. The Alvarenga Prize was established by the will of Pedro Francisco da Costa Alvarenga of Lisbon, Portugal, an associate fellow of the College of Physicians of Philadelphia. The college invites the recipient to deliver the Alvarenga Lecture. Dr. Knisely became head of the department of anatomy at the Medical College of the State of South Carolina, Charleston, July 1.

Society News.—At the annual meeting of the Chicago Society of Internal Medicine May 24, Dr. George H. Coleman was elected president and Dr. Ernest G. McEwen, Evanston, secretary-treasurer.——At the annual meeting of the Chicago Gynecological Society, Dr. Herbert E. Schmitz was installed as president and Dr. Eugene A. Edwards was chosen president-elect; Dr. Edward M. Dorr was elected secretary, and Dr. Fred O. Priest was elected treasurer.

The Cappe Prize in Medicine.—The Institute of Medicine of Chicago offers a prize of $400 for the most meritorious investigation in medicine or in the specialties of medicine. The investigation may be also in the fundamental sciences, provided the work has a definite bearing on a medical problem. Competition is open to graduates of Chicago medical schools who completed their internship or one year of laboratory work in 1946 or thereafter. Manuscripts must be submitted to the secretary of the Institute of Medicine of Chicago, 86 East Randolph Street, Chicago 1, not later than Dec. 31, 1948. The manuscript of the prize paper is to become the property of the Institute of Medicine of Chicago. If no paper presented is deemed worthy of the prize, the award may be withheld at the discretion of the Board of Governors.

INDIANA

State Health Officer Honored.—Dr. Leroy E. Burney, Indianapolis, who has served three years as state health commissioner, was awarded a plaque and a certificate by the Indiana Chamber of Commerce in recognition of his work for the state department. The award is known as the Good Governmental Award.

University Expansion Projects.—Two major construction projects have been approved for the Indiana University Medical Center, Indianapolis, including expansion of the department of radiology and erection of a research wing to the James Whitcomb Riley Hospital for Children. The addition to the department of radiology will add 5,600 square feet of floor space. The research wing, for which the state has allocated funds, will provide laboratories for research into children's diseases. The Riley Memorial Association has approved a grant of $250,000 in support of research over a period of five years.

MICHIGAN

Rabies Control.—A total of 163 new cases of rabies and 1 human death this year shows the urgent need for local rabies control measures. To aid in the control of rabies, the Michigan Department of Health and the Michigan Department of Agriculture have prepared a pamphlet "Protect Yourself, Your Family and Your Dog Against Rabies." Local rabies control committees are being organized in several counties; ten counties are under dog quarantine, and five counties require vaccination of dogs before licensing. Similar protection is needed in all the thirty-four Southern Michigan counties in the rabies danger area. The pamphlet is available without charge from the local health departments or the Michigan Department of Health, Lansing 4.

NEW YORK

Cardiac Research.—The U. S. Public Health Service has granted Harold C. Wiggers, Ph.D., professor of physiology and pharmacology, Albany Medical College, $7,600 for one year's research on the heart and the circulation of blood. He will be assisted by Drs. Edward Sharkey and G. Rehmi Denton, and Harold Goldberg, M.S.

Postgraduate Instruction.—The Medical Society of the State of New York, with the cooperation of the New York State Department of Health, has arranged postgraduate instruction for a joint meeting of the Syracuse and Utica Academies of Medicine, September 16, 8 p. m., at the Rome Country Club, Rome. Dr. Floyd S. Winslow, Rochester, will speak on "The Doctor on the Witness Stand."

New York City

University Appointment.—Dr. H. Houston Merritt, chief, division of neuropsychiatry at Montefiore Hospital, has been appointed professor of neurology and executive officer of the department at Columbia University College of Physicians and Surgeons, and director of the neurologic service of the Neurological Institute of Presbyterian Hospital. Dr. Merritt is a graduate of Johns Hopkins University School of Medicine, Baltimore.

New Director of Vanderbilt Clinic.—The Board of Trustees of Presbyterian Hospital has named Dr. Joseph Earl Snyder director of Vanderbilt Clinic. Caring for over 300,000 patients a year, the clinic is the outpatient department for the voluntary hospitals of the Columbia-Presbyterian Medical Center. Dr. Snyder was graduated from the University of Pennsylvania School of Medicine, Philadelphia, 1943, and after an internship became chief resident in pathology and administrative assistant at the Hospital of the University of Pennsylvania. During World War II he served as a radiologist at the separation center, Camp McCoy, Wis., and as chief of laboratory and pathologist to the 6th Service Command at Gardiner General Hospital, Chicago. After the war Dr. Snyder returned to the Graduate Hospital of the University of Pennsylvania, where he has been assistant director under Dr. Robin C. Buerki.

OHIO

Personal.—The 1948 Lower Fellowship Thesis Prize was awarded on June 15 to Dr. Alys H. Lipscomb, Cleveland, for her paper, "Incidence of Various Types of Essential Hypertension as Related to Evaluation of Successful Therapy."

Appoint Head of Ophthalmology Department.—Dr. Roscoe J. Kennedy has been appointed head of the department of ophthalmology at the Cleveland Clinic. Dr. Kennedy joined the clinic staff in 1937. He was graduated from the State University of Iowa College of Medicine, Iowa City, 1931. During World War II he served four years with the medical corps of the U. S. Navy in the Southwest Pacific.

SOUTH DAKOTA

Appoint Superintendent of State Board.—Dr. Gerald J. Van Heuvelen, Pierre, was appointed to succeed Dr. Gilbert Cottam, Pierre, retired, as superintendent of the South Dakota State Board of Health, effective July 1. Dr. Van Heuvelen received his M.D. degree from Rush Medical College, Chicago, in 1932.

Course for Medical Technicians.—Facilities for training students in medical technology have been expanded at the University of South Dakota School of Medical Sciences, Vermillion. Sacred Heart Hospital and Sioux Valley Hospital, Sioux Falls, are also cooperating with the medical school in this training. The medical school is developing plans also to establish a curriculum in x-ray technology in cooperation with the aforementioned hospitals. This course will be open for the first time this fall to students wishing to prepare themselves for a career in x-ray technology.

TEXAS

State Medical Election.—Officers of the State Medical Association of Texas for the coming year are Dr. Tate Miller, Dallas, president; Dr. George V. Brindley, Temple, president-elect; Dr. Thomas H. Thomason, Fort Worth, treasurer, and Dr. Harold M. Williams, Fort Worth, secretary-editor.

Workshop for Cardiac Patients.—The Galveston County chapter of the Texas Heart Association has planned for hospital patients with cardiac disease a workshop designed to give training in various handcrafts which might lead to employment for persons whose heart conditions prevent them from returning to previous jobs.

Dr. Kemp Comes to Baylor University.—Dr. Hardy A. Kemp, dean of Wayne University College of Medicine, Detroit, has been named professor of preventive medicine and chairman of the department of public health and preventive medicine at Baylor University College of Medicine, Houston. He will assume these duties in September. Dr. Kemp served on the faculty at Baylor from 1928 until 1939, when he became dean and professor of preventive medicine at the University of Vermont College of Medicine, Burlington, Vt. During World War II he was a colonel in the army medical corps. He has been dean of the school of medicine at Wayne University since 1945.

WEST VIRGINIA

New Hospital License Law.—Applications for license under the new state hospital licensing law have been received by the state health department from one hundred and nine of the one hundred and fifty-two known institutions caring for the sick and injured. The deadline for submission of applications expired July 1. The report compiled by the health department showed that applications have not been filed by nine general hospitals, six doctors maintaining offices with five or more beds, two osteopathic hospitals and twenty-five nursing and alcoholic homes.

Dr. Gaydosh Honored.—Dr. Michael Gaydosh, Wheeling, has been chosen by Slovak V. Amerike as the American Slovak Father for 1948. Dr. Gaydosh was advised of his selection, in part, as follows: "This special honor was bestowed for your unselfish work for humanity performed as one of the oldest American doctors of Slovak descent. Your sacrifices and endeavors in the field of medicine and fraternalism merit special recognition." Dr. Gaydosh came to this country from Czechoslovakia. After working his way, he received his M.D. degree from the University College of Medicine, Richmond, Va. He opened offices in Wheeling in 1905 and has continued to practice there. Dr. Gaydosh has served as supreme medical examiner for the First Slovak Catholic Union for the past thirty years. He is also a member of the executive board of the Slovak League of America.

Resume Motherhood Correspondence Course.—Resumption of the "Motherhood Correspondence Course" is about to be undertaken by the state health department, and letters concerning the availability of this service to all practitioners and health departments are being mailed to component societies of the state medical association. The purpose is to help physicians reduce the heavy loss in unborn and newly born babies, which finds West Virginia fourth from the bottom in infant mortality among all states and territories. The course before World War II was used by mothers on recommendation of their family doctors. Over 12,000 West Virginia women took advantage of the service in 1943, the last year that it was in operation. Statistics show that 69 per cent of all infant deaths in West Virginia during the past three years have been due to prenatal, natal and immediately postnatal causes. Within the past five years the increase of these deaths has totaled nearly 10 per cent. A recent study made by the state health department discloses not more than twenty-five full time obstetricians in this state, mostly in the larger cities.

WISCONSIN

The Godfrey Scholarship.—A trust fund, to be known as the Dr. Rush C. Godfrey Medical Scholarship Fund, has been established by Mrs. Rush C. Godfrey of Lancaster in honor of her late husband, who died April 14, 1947. Interest from the fund will be used for the education of a boy or girl in the practice of medicine.

Symposium on Steroid Hormones.—A symposium on steroid hormones will be held at the University of Wisconsin Medical School, Madison, September 6-8, as a part of the centennial celebration of the Wisconsin State University. Scientists from many universities and medical schools throughout this country, England and Canada are on the program. This symposium will be open to the public and physicians, chemists and scientists from other fields are invited to participate. No registration fee is to be charged. Reservations for board and room, available in Elizabeth Waters Hall on the Wisconsin campus at $16.25 for the three day period, may be made with Dr. Henry A. Lardy, Department of Biochemistry, University of Wisconsin, Madison 6.

GENERAL

Personal.—Dr. Charles S. Cameron, medical director of the American Cancer Society, announces the appointment of Dr. Thomas F. Nealon Jr., Jessup, Pa., as assistant director of the service division of the society. Dr. Nealon received his M.D. degree from Jefferson Medical College of Philadelphia, 1944, under the U. S. Naval Reserve program. Following separation from the Navy, he engaged in general practice at Olyphant, Pa.

Award of Remington Medal.—Andrew G. DuMez, Ph.D., Baltimore, dean, University of Maryland School of Pharmacy, will receive the Remington Medal this fall. This gold medal commemorates Joseph P. Remington, pharmacist, who was chairman of the U. S. P. Revision Committee for several decades. Since the establishment of the American Council on Pharmaceutical Education in 1932, Dr. DuMez has served as secretary-treasurer, being primarily responsible for painstaking analysis of records of performance by all colleges of pharmacy, supervision of inspection schedules, formal rating of colleges and the task of dealing with educational authorities.

American Association of Blood Banks.—The first annual meeting of this organization will be held at the Hotel Statler, Buffalo, August 26-28, under the presidency of D. Albin Matson, Ph.D., Salt Lake City. Among the speakers will be: Harry Wallerstein, New York, Substitution Transfusion in Erythroblastosis Fetalis: Indications and Techniques; John D. Stewart, Buffalo, Blood Volume in Relation to Surgery; John Elliott, Sc.D., Miami, Fla., Red Cell Suspension Transfusions; Sidney C. Levinson, Chicago, Ultraviolet Irradiation of Plasma; Philip Levine, Newark, N. J., Routine Rh Tests for a Transfusion Service; Paul I. Hoxworth, Cincinnati, Blood Bank Organization, and Lloyd R. Newhouser, Washington, D. C., Blood Bank Procedures in Atomic Catastrophe.

International Congress on Industrial Medicine.—The Ninth International Congress on Industrial Medicine will be held in London, September 13-17, at the Caxton Hall, Westminster. Sections and the chairmen are as follows: social aspects, Professor Thomas Ferguson, Glasgow; environment, Professor Edward C. Dodds, London; nursing, Miss F. Clare Sykes, London; clinical, Professor Ronald E. Lane, Manchester; practice, Arthur J. Amor, London; special section, Dr. Edward R. A. Merewether, London. The official languages of the congress are French and English. The fee is 3 pounds (English money), payable to the treasurer, Dr. Margaret L. Dobbie-Bateman. Information may be obtained from Room 501, Garden Court Wing, B.M.A. House, Tavistock Square, London, W.C. 1.

Impostor.—Any one knowing the whereabouts of a person using the name of Samuel P. Hall and representing himself to be a physician should communicate with the prosecuting attorney at Manistique, Michigan. The person has been described as a white man, 30 years of age, 5 feet 11 inches tall, weighing about 160 pounds, with black hair, brown eyes and a small mustache, and as being a "classy dresser." He has apparently been posing as Samuel Pike Hall, who is a reputable physician at Oakland, Calif. He is not, of course, to be confused with Samuel Parks Hall Jr., of Scottsboro, Ala. Dr. Samuel Pike Hall recently advised us that he found the name of Samuel Pike Hall on a drug house mailing list. The address given in early 1948 was at a hospital in West Virginia, but the person using that name left after a short stay, without leaving a forwarding address.

Society Elections.—The American Urological Association, at its annual meeting May 19, installed Dr. Charles C. Higgins, Cleveland, president, and elected Dr. Carl F. Rusche, Los Angeles, president-elect. Dr. Thomas D. Moore, Memphis, Tenn., was reelected secretary and Dr. George C. Prather, Brookline, Mass., was reelected treasurer. The next annual meeting will be held at the Hotel Biltmore, Los Angeles, May 16-19, 1949.—At the annual meeting of the North Pacific Society of Neurology and Psychiatry held at Vancouver, B. C., April 2-3, Dr. Herman A. Dickel, Portland, Ore., was elected president; Dr. H. Ryle Lewis, Spokane, Wash., president-elect, and Dr. Gerhard B. Haugen, Portland, Ore., secretary-treasurer. The 1949 meeting of the society will be held in Portland, Ore.—The Association for Research in Nervous and Mental Diseases has elected Dr. Henry W. Woltman, Rochester, Minn., president.

Grants and Fellowships in Cancer Research.—The committee on growth of the National Research Council, acting for the American Cancer Society, will entertain applications for grants and fellowships. Applications for extension of existing grants in cancer research will be received until October 1, applications for new grants until November 1. Decision on applications submitted during this period will be made in most cases soon after February 1. Grants approved at this time ordinarily will become effective July 1, 1949. Fellowship applications may be submitted at any time. Those received prior to November 1 will be acted on by the Committee on Growth in December. Those received between November 1 and March 1 will be acted on in April. Fellowships ordinarily will begin July 1, though this date may be varied at the request of the applicant. During the past year the American Cancer Society, Inc., on recommendation of the Committee on Growth, has approved research grants and fellowships totaling over $2,000,000. Communications regarding grants and fellowships should be addressed to Executive Secretary, Committee on Growth, National Research Council, 2101 Constitution Avenue, N.W., Washington 25, D. C.

International Union Against Venereal Disease.—The General Assembly of the International Union Against Venereal Diseases will be held in Copenhagen, Denmark, September 6-10, at the invitation of the Danish Government and the Danish Society Against Venereal Disease. The agenda will include: (1) plans for the international venereal disease control program; (2) consideration of cooperation with the United Nations, the World Health Organization and UNESCO; (3) consideration of biologic, physiologic and psychologic aspects of human behavior in relation to control of venereal diseases; (4) treatment of syphilis; (5) the international inquiry concerning transmission of venereal diseases in the Rhine River district. The United States delegation to Copenhagen is expected to include, besides Dr. William F. Snow, Dr. and Mrs. Robert H. Bishop Jr., Cleveland; Major Louis N. Altshuler, M.C., U. S. Department of the Army, Dr. John R. Heller Jr., former venereal disease chief, U. S. Public Health Service, and Mrs. Josephine V. Tuller, assistant director of the union's regional office for the Americas. Information may be obtained from Miss Marguerite Troué, Administrative Secretary, at the international headquarters, Institut Fournier, 25, Boulevard Saint-Jacques, Paris XIV, France, or of Miss Jean B. Pinney, Director, Regional Office for the Americas, 1790 Broadway, New York 19.

National Board Elects New Members.—At the annual meeting of the National Board of Medical Examiners the following new members were elected: Dr. Russell L. Haden, Cleveland, who was nominated by the Council on Medical Education of the American Medical Association to succeed Major General Merritte W. Ireland, Washington, D. C.; Dr. Paul B. Magnusen, Chicago, medical director of the Veterans Administration; Dr. Eugene A. Gillis, Washington, D. C., who was nominated by Surgeon General Leonard A. Scheele, Washington, D. C., to succeed Major General Warren F. Draper, Washington, D. C., as a second representative from the U. S. Public Health Service; Dr. Winfred Overholser, superintendent of St. Elizabeth's Hospital and professor of psychiatry at George Washington University School of Medicine, Washington, D. C.; Dr. Hugh Rodman Leavell, Harvard University School of Public Health, and Dr. James V. Warren, professor of physiology, Emory University School of Medicine, Atlanta, Ga. The present officers were elected for another year as follows: Dr. Borden S. Veeder, St. Louis, president; Mr. Everett S. Elwood, executive secretary and treasurer, Philadelphia; and Dr. J. Stewart Rodman, Philadelphia, medical secretary. In addition to the officers the members of the executive committee for the ensuing year are: Dr. Roy B. Harrison, New Orleans, La.; Rear Admiral H. Lamont Pugh, Washington, D. C.; Dr. Robert W. Keeton, Chicago; and Dr. W. Barclay Parsons, New York. It is expected that the next annual meeting will be held at the time of the annual meeting of the American Medical Association at Atlantic City.

CANADA

Society News.—At the annual meeting of the Newfoundland Medical Association, St. Johns, Newfoundland, July 6-10, Dr. Robert J. Booher, assistant attending surgeon, Memorial Hospital for Cancer and Allied Diseases, and surgeon to the Pack Medical Group, spoke on "The Diagnosis and Surgical Management of Gastric Tumors" and "The Diagnosis and Management of Tumors of Soft Somatic Tissues."

Courses in Clinical Cytology.—McGill University Faculty of Medicine, Montreal, will present two courses in the diagnosis of uterine cancer this fall. One, from September 6 to October 5, is for physicians interested in cytologic technics, staining methods and interpretation. September 6-10, another course of general lecturers and demonstrations will take up the practical application of the vaginal smear and the "surface-biopsy" to every day practice. Tuition for the last course will be $25.

PUERTO RICO

Puerto Rico Medical Association Meeting.—At a special meeting of the Puerto Rico Medical Association in Ponce, July 23-25, Dr. Harry Gold, professor of clinical pharmacology, Cornell University Medical College, New York, delivered several lectures. A round table discussion on tuberculosis was held under the direction of Dr. Juan A. Pons, San Juan, commissioner of health of Puerto Rico. On July 25 a memorial plaque in honor of the late Dr. Bailey K. Ashford was unveiled on the same building in Ponce where this U. S Army medical officer determined the cause (hookworm) of anemia of the agricultural class of Puerto Rico in 1899.

Public Health Meeting.—The Puerto Rico Public Health Association elected the following board of directors for 1948 at its annual meeting held in San Juan: Drs. Juan A. Pons, president; Americo Pomales, vice-president, and Nelson Biaggi, secretary. The association recommended the creation of a mental hygiene bureau in the Insular Department of Health. The papers read at this meeting will be integrated in a single document to be presented before the Mental Hygiene Congress next August at London, England. Records were taken of the most important Spanish lectures, which are to be reproduced in Latin American countries. Among the American doctors who were guests of honor were Charles E. A. Winslow, Dr. P.H., New Haven, Conn.; William W. Peter, of the Inter-American Affairs Institute, Washington, D. C.; Harold W. Brown, Columbia University, New York; Robert S. Freed, New York Agricultural Experiment Station; E. J. Herringer, sanitary engineer, U. S. Public Health Service, and Reginald M. Atwater, Dr. P.H., executive secretary, American Public Health Association.

CORRECTIONS

Cesarean Hysterectomy.—In the paper on this subject in THE JOURNAL, July 17, page 1017, bibliographic reference no. 3 at the bottom of the page should read as follows: Baldwin, J. F.: Tr. Am. A. Obs., Gynecol. and Abd. Surgeons **42**:98, 1929.

Roentgenologic Treatment of Lymph Nodes and Spleen.—In the article by Dr. Sidney Rubenfeld in THE JOURNAL, July 3, 1948 "(fig. 2)," should be deleted from line eight in the second column on page 849. In the legend of figure 4, the second word in the second line should be "identified." On page 850, line 2 "(figs. 3 and 4)," should be "(figs. 2 and 3)." On page 850, column one, lines six and seven, "fig. 4" should be added to "(figs. 5, 6 and 7)."

Deaths

Robert Bruce Preble ● Chicago, professor of medicine at Northwestern University Medical School, died at St. Luke's Hospital July 26, aged 82, of myocardial infarction, diabetes mellitus and third degree burns. Dr. Preble was born in Chicago, March 14, 1866. He was graduated from the University of Michigan in Ann Arbor in 1889 and received his medical degree from Northwestern University Medical School, Chicago, in 1891. Later he interned at the Cook County Hospital, where he served on the staff, and in 1894 studied at the University of Vienna. The following year he joined Northwestern as professor of medicine. Dr. Preble was secretary of the Section on Practice of Medicine of the American Medical Association in 1901-1902, and was past president of the Chicago Medical Society and the Chicago Heart Association. He was a member of the Association of American Physicians and a specialist certified by the American Board of Internal Medicine. In April 1917 he was commissioned a major in the medical reserve corps; he served as chief of the hospital center at Mars Sur Alliers, France, and on Jan. 31, 1919, was discharged with the rank of lieutenant colonel. Dr. Preble received an American citation and the French Legion of Honor. He was attending physician at St. Luke's and Wesley Memorial hospitals, and was the author of a book on "Pneumonia and Pneumococcus Infections" written in 1905.

Edward Speidel, Louisville, Ky.; born in Philadelphia, Nov. 12, 1859; University of Louisville Medical Department, 1895; also a graduate in pharmacy; professor emeritus of obstetrics at his alma mater; specialist certified by the American Board of Obstetrics and Gynecology, Inc.; past president of the Jefferson County Medical Society and the Louisville Society of Obstetricians; member of the American Association of Obstetricians, Gynecologists and Abdominal Surgeons and the American Medical Association; fellow of the American College of Surgeons; served on the staffs of the City, Jewish, St. Anthony's and Kentucky Baptist hospitals and the Norton Memorial Infirmary; died April 13, aged 88.

Murray Nathan Fowler, Mansfield, Ohio; University of Toronto Faculty of Medicine, Toronto, Ont., Canada, 1923; member of the American Medical Association and of the American Psychiatric Association; during World War II served as chief psychiatrist for the disciplinary training center of the Mediterranean theater of operations and was discharged with rank of major; formerly on the staff of the Athens (Ohio) State Hospital and superintendent of the Institution for Feeble-Minded at Apple Creek; psychiatrist at the Ohio State Reformatory; died in the Mansfield General Hospital April 29, aged 49.

Carmelo Baldini, New York; Regia Università di Napoli Facoltà di Medicina e Chirurgia, Italy, 1912; member of the American Medical Association; major in the medical corps of the Italian Army during World War I; died March 2, aged 61, of carcinoma, following roentgen ray burns.

Edward Hagop Bedrossian ● Philadelphia; University of Pennsylvania School of Medicine, Philadelphia, 1912; Army School of Aviation Medicine, San Antonio, Texas, in 1927; lieutenant colonel, air force reserve flight surgeon; formerly demonstrator in ophthalmology at the Temple University School of Medicine; chief of department in ophthalmology at Delaware County Hospital in Drexel Hill, Pa.; died in Clifton Forge, Va., April 17, aged 61, of coronary thrombosis.

David P. Bowman, Crimora, Va.; University of Pennsylvania Department of Medicine, Philadelphia, 1887; died in the King's Daughters' Hospital, Staunton, April 14, aged 90.

Lawrence Bernard Boylan, Paterson, N. J.; Maryland Medical College, Baltimore, 1913, member of the American Medical Association; formerly supervisor of school hygiene and county physician; city physician; served during World War I; affiliated with St. Joseph's and Paterson General hospitals; died April 14, aged 59, of chronic myocarditis.

Bernard Eugene Britt, Nashville, Tenn.; University of Nashville Medical Department, 1905; died April 29, aged 72.

Anna Frances S. Lee Brown, Denver; the Hahnemann Medical College and Hospital, Chicago, 1893; at one time health officer of Telluride, Colo.; died April 8, aged 80, of pneumonia.

Leo Greenleaf Bruce, Durham, N. C.; Meharry Medical College, Nashville, Tenn., 1926; member of the board of directors of the Durham County Tuberculosis Association and of the Durham Chapter of the American Cancer Society; affiliated with the Lincoln Hospital; died April 7, aged 49, of carcinoma of the lung.

Robert Finley Campbell, Phoenix, Ariz.; University of Kansas School of Medicine, Kansas City, 1921; died April 19, aged 54, of perinephritic abscess.

Frederick S. Casto, Charleston, W. Va.; University of Louisville (Ky.) Medical Department, 1893; formerly justice of the peace in Kenna and for many years president of the board of pension examiners of Jackson County; died April 19, aged 81, of heart disease.

Ernest Johnson Colberg, Alameda, Calif.; University of Minnesota Medical School, Minneapolis, 1924; died April 17, aged 60.

William Gregory Cole ● Pittsfield, Mass.; Columbia University College of Physicians and Surgeons, New York, 1928; specialist certified by the American Board of Radiology, Inc.; member of the Radiological Society of North America, Inc.; on the staffs of the House of Mercy and Hillcrest hospitals in Pittsfield and Fairview Hospital in Great Barrington; formerly on the staff of St. Agnes Hospital in White Plains, N. Y.; died in Bermuda April 15, aged 46, of coronary thrombosis.

Charles Chapman Collester ● Spencer, Iowa; Jefferson Medical College of Philadelphia, 1909; fellow of the American College of Surgeons; affiliated with the Spencer Municipal Hospital; died April 11, aged 62, of carcinoma of the prostate.

Donald Grey Colp, Robbinsdale, Minn.; Minneapolis College of Physicians and Surgeons, 1908; at one time a minister; died in Northwestern Hospital, Minneapolis, April 14, aged 78, of carcinoma of the lung with general metastases.

Augustus Eugene Conter, Apalachicola, Fla.; Atlanta College of Physicians and Surgeons, 1902; member of the American Medical Association; veteran of the Spanish-American War; at one time secretary-treasurer of the Jefferson County Medical Society; died April 12, aged 76, of coronary occlusion.

Howard L. Corbus, Harrisburg, Pa.; Western Pennsylvania Medical College, Pittsburgh, 1892; served on the staff of the Harrisburg State Hospital; died April 6, aged 79, of coronary thrombosis.

Walter Louis Cottingham ● Seattle; the Hahnemann Medical College and Hospital, Chicago, 1913; served as president of the Ford County (Ill.) Medical Society; on the staff of the Columbus Hospital; died April 14, aged 66, of angina pectoris.

William Thomas Cox, Gentry, Ark. (licensed in Arkansas in 1903); died April 3, aged 81, of acute dilatation of the heart.

Carl J. Cramm ● Russell, Kan.; University of Louisville (Ky.) Medical Department, 1897; for many years county health officer; president of the staff of Russell City Hospital; died in Ellsworth (Kan.) Hospital April 14, aged 72, of carcinoma of the rectum.

Charles Balfour Darling, Waban, Mass.; Harvard Medical School, Boston, 1894; member of the American Medical Association; for many years on the faculty of Tufts College Medical School, Boston; served during World War I; charter member of the staff of the Free Hospital for Women in Jamaica Plain; died in the New England Baptist Hospital, Boston, April 19, aged 78, of duodenal ulcer.

David J. Evans ● Bethesda, Md.; Rush Medical College, Chicago, 1898; member of the Illinois State Medical Society; fellow of the American College of Surgeons; for many years practiced in Aurora, Ill., where he served on the staffs of the St. Joseph Mercy, St. Charles and Copley hospitals; died in the Suburban Hospital April 7, aged 75, of coronary thrombosis.

John Henry Fager Jr. ● Harrisburg, Pa.; University of Pennsylvania Department of Medicine, Philadelphia, 1904; past president of the Harrisburg Academy of Medicine; affiliated with the Harrisburg Hospital; died April 14, aged 70, of cerebral thrombosis.

Charles Wood Fassett, Burlingame, Calif.; Ensworth Medical College, St. Joseph, Mo., 1900; member of the American Medical Association; member and past president of the Missouri State Medical Association; served as secretary of the Buchanan County (Mo.) Medical Society and of the Missouri Valley Medical Society; died April 14, aged 86.

Charles W. Gardiner, Batavia, N. Y.; University of Vermont College of Medicine, Burlington, 1891; died April 30, aged 82, of coronary sclerosis.

George Franklin Garland, Winthrop, Mass.; Baltimore Medical College, 1898; died March 28, aged 81, of chronic myocarditis.

Clara Hyde Gillard, Cleveland; the Hahnemann Medical College and Hospital, Chicago, 1889; died in Port Clinton April 8, aged 86, of acute myocardial failure.

William George Gordon ● Birmingham, Mich.; University of Michigan Medical School, Ann Arbor, 1935; member of the Kansas State Medical Society; fellow of the American College of Surgeons; served an internship and residency at the University Hospital in Ann Arbor; formerly associate professor of surgery at the University of Kansas School of Medicine, Kansas City, Kan.; died April 21, aged 36, of asphyxia.

James Allen Green ● Clayton, Ga.; Atlanta College of Physicians and Surgeons, 1908; served as mayor and councilman of Clayton; for many years a trustee of the local school; died in the Emory Hospital, Atlanta, March 23, aged 65, of hypertensive cardiovascular disease.

William Edwin Herring, Ida, La.; College of Physicians and Surgeons, Baltimore, 1891; died April 19, aged 86.

Stanley Vincent Hodge ● Minneapolis; Northwestern University Medical School, Chicago, 1910; served during World War I; died in the Swedish Hospital April 27, aged 67, of acute cardiac failure.

Jennie Hraba, Boston; Middlesex College of Medicine and Surgery, Cambridge, Mass., 1921; died March 5, aged 71, of cerebral hemorrhage.

Allan Pettit Hughes, Auburn, Wash.; the Hahnemann Medical College and Hospital, Chicago, 1907; College of Physicians and Surgeons of Chicago, School of Medicine of the University of Illinois, 1909; member of the American Medical Association; served during World War I; died in Auburn General Hospital April 3, aged 67, of complications following a cerebral hemorrhage.

William Jennings Irby, Benton, Kan.; Kansas City (Mo.) College of Medicine and Surgery, 1917; member of the American Medical Association; president of the Butler County Medical Society; served during World War I; affiliated with the Allen Memorial Hospital, El Dorado, Bethel Hospital, Newton, Wichita Hospital, St. Joseph's Hospital, St. Francis Hospital and Wesley Hospital in Wichita and the Bell Memorial Hospital in Kansas City; died near Strong City, April 8, aged 55, of injuries received in an automobile accident.

Fred Anderson Jones, Paducah, Ky.; Vanderbilt University School of Medicine, Nashville, 1914; member of the American Medical Association; past president of the McCracken County Medical Society; on the staffs of Riverside Hospital and Illinois Central Hospital, where he died April 16, aged 68, of cirrhosis of the liver and carcinoma of the sigmoid.

Joseph Adelard Laurion, Somerville, Mass.; Albany (N. Y.) Medical College, 1895; died March 20, aged 77, of myocardial failure.

Lester Benjamin Lougee, Marilla, N. Y.; Physio-Medical College of Indiana, Indianapolis, 1896; member of the American Medical Association; served as health officer; founder and president of the Marilla Library; on the staff of the Deaconess Hospital in Buffalo, where he died April 11, aged 76, of heart disease, following an operation.

James Straine Louthan, Beaver Falls, Pa.; Western Reserve University Medical Department, Cleveland, 1882; member of the American Medical Association; physician for the Pittsburgh and Lake Erie Railroad; died April 12, aged 93.

Joseph Wooding Love, Springfield, Mo.; College of Physicians and Surgeons, medical department of Columbia College, New York, 1890; member of the American Medical Association; past president of the Missouri State Medical Society; for many years secretary and past president of the Greene County Medical Society; past president of the Southwest Clinical Society; died in the Veterans Administration Hospital, Little Rock, May 3, aged 81, of bronchopneumonia and cerebral arteriosclerosis.

Norris C. Magraw, Cadiz, Ky.; University of Louisville Medical Department, 1894; member of the American Medical Association; died in the Jennie Stuart Hospital in Hopkinsville, April 19, aged 75, of complications as the result of a fractured hip received in a fall on an icy pavement in February.

Paul John Mateicka, Milwaukee; University of Wisconsin Medical School, Madison, 1942; member of the American Medical Association; interned at the Indiana University Medical Center in Indianapolis; on the staff of the Sacred Heart Sanitarium and an instructor at the school of nursing; died April 13, aged 32.

Daniel Bradford McCann, Los Angeles; Rush Medical College, Chicago, 1890; died April 10, aged 89, of myocarditis.

William Emmett McClain, Seattle; Keokuk (Ia.) Medical College, College of Physicians and Surgeons, 1905; member of the American Medical Association; on the staffs of the Ballard General and Columbus hospitals; died April 10, aged 70, of coronary occlusion.

Charles Ellsworth McCune ● West Springfield, Pa.; Western Pennsylvania Medical College, Pittsburgh, 1897; died in Erie April 7, aged 85, of pulmonary tuberculosis.

William Henry McKinney, Athena, Ore.; Gate City Medical College, Dallas, 1908; Eclectic Medical University, Kansas City, 1917; died in Pendleton March 2, aged 65.

Aaron Moore ● Central Islip, N. Y.; Tulane University of Louisiana School of Medicine, New Orleans, 1924; member of the American Psychiatric Association; served on the staff of the Central Islip State Hospital; died April 3, aged 49, of coronary occlusion.

David Cowee Pierpont ● Ironwood, Mich.; Columbia University College of Physicians and Surgeons, New York, 1903; on the staff of the Newport Hospital; died April 15, aged 69, of coronary occlusion.

Clyde E. Purcell ● Paducah, Ky.; Hospital College of Medicine, Louisville, 1903; died in the Riverside Hospital April 23, aged 75, of cerebral hemorrhage.

Charles Duncan Rankin, Flippin, Ark.; St. Louis College of Physicians and Surgeons, 1922; Kansas City (Mo.) College of Medicine and Surgery, 1923; died in Gassville April 30, aged 72, of heart disease.

Ida Virginia Reel, Philadelphia; Woman's Medical College of Pennsylvania, Philadelphia, 1882; died April 28, aged 91, of coronary thrombosis.

Franklin Ward Renfrew, Goshen, Conn.; Cornell University Medical College, New York, 1919; member of the American Medical Association; served during World War I; during World War II was connected with the U. S. Public Health Service; formerly on the staffs of the Beekman-Downtown and City hospitals in New York; died April 29, aged 55, of cerebral hemorrhage.

Francis M. Reynolds, Montpelier, Ind.; Medical College of Indiana, Indianapolis, 1897; served as mayor; died April 16, aged 78, of coronary disease.

Schuyler Parshall Richmond, Syracuse, N. Y.; Syracuse University College of Medicine, 1903; member of the American Medical Association; associate clinical professor of medicine and dermatology at his alma mater; affiliated with the Memorial, University and St. Joseph's hospitals; died April 8, aged 67, of transverse myelitis.

Harvey Hamilton Roberts ● Georgetown, Ky.; Medical College of Ohio, Cincinnati, 1890; past president of the Scott County Medical Society; served on the staff of the Good Samaritan Hospital, Lexington; died in St. Joseph's Hospital, Lexington, April 19, aged 82, of coronary heart disease.

Maurice Rosier, St. Petersburg, Fla.; University of the South Medical Department, Sewanee, Tenn., 1899; served in the U. S. Navy during World War I; died April 30, aged 73.

Philip Edward Rossiter, Avon, N. Y.; Long Island College Hospital, Brooklyn, 1902; member of the American Medical Association; served during World War I; later an officer in the regular army; formerly affiliated with the U. S. Veterans Bureau; died in the Strong Memorial Hospital, Rochester, April 30, aged 71, of bronchopneumonia.

Frederick Schwartz, Philadelphia; Jefferson Medical College of Philadelphia, 1888; died in Sea Isle City, N. J., April 19, aged 85, of carcinoma of the pancreas.

Cornelius James Seay, Scarsdale, N. Y.; University College of Medicine, Richmond, 1898; member of the American Medical Association and the American Urological Association; died in White Plains (N. Y.) Hospital April 24, aged 74, of carcinoma.

Edmund Spicer, Waterbury, Conn.; Yale University School of Medicine, New Haven, 1905; member of the American Medical Association; fellow of the American College of Surgeons; for many years on the staff of the Waterbury Hospital; died April 12, aged 66, of ruptured aneurysm of the aorta.

Joseph Blankinship Thigpen, Bay Springs, Miss.; Medical Department of Tulane University of Louisiana, New Orleans, 1905; member of the American Medical Association; served as county health officer; president of the Bay Springs Bank; died April 27, aged 66, of tuberculosis.

Charles Sherman Van Ness, Peterson, Iowa; Queen's University Faculty of Medicine, Kingston, Ont., Canada, 1904; died April 26, aged 74, of cerebral hemorrhage.

William H. Winningham, Trenton, Mo.; Marion-Sims College of Medicine, St. Louis, 1893; member of the American Medical Association; on the staff of the Wright Memorial Hospital, where he died April 30, aged 80, of myocarditis.

Beverly Thomas Young, Glennville, Calif.; University of Texas School of Medicine, Galveston, 1907; died in a hospital at Bakersfield April 8, aged 64.

Foreign Letters

LONDON

(From Our Regular Correspondent)

July 4, 1948.

Annual Meeting of British Medical Association

The first normal postwar annual meeting of the British Medical Association was held at Cambridge and was well attended, in spite of the difficulties of travel by car, food rationing, shortage of accommodation and other obstacles arising from the abnormal condition of the country which still persists after the war. At the meeting of representatives it was announced that the previous week 65,000 copies of the *British Medical Journal* had been posted, which was a record, and over 3,000,000 copies had been printed in the last year. The increase in circulation was partly due to increased membership of the association and also to increased subscriptions from nonmembers. From the business point of view, last year was extremely profitable. The excess of receipts over expenditure amounted to $124,000. A new quarterly, the *Journal of Clinical Pathology*, had been added to the publications of the association. The two abstracting journals, the *Abstract of World Medicine* and the *Abstract of World Surgery*, had been well received, and the circulation had reached the estimated figure by the end of the first year of publication. The total income of the association was $676,000.

Waste of Physician's Time Under Medical Socialism

In their enthusiasm for medical socialism its advocates entirely overlook its drawbacks. In a letter to the *Times* a physician who has had much experience of it in the panel system shows how much time is wasted. At least one third of his panel patients come for no medical purpose at all. They come for certificates of a great variety or for the repeat of a prescription. Here lies the main difference between panel and private practice and the main reason for so much unnecessary work which clutters up the office and prevents good work for those needing a physician's care. The private patient, having seen his doctor, can get his prescription repeated as often as necessary by simply going to the pharmacist, but the panel prescription can be dispensed only once. For every fresh bottle the panel patient must visit the physician to obtain a fresh prescription, wasting his own time and the physician's time. It may be asked: "Why not make a new regulation abolishing the difference?" The answer reveals another drawback of medical socialism. The panel patient gets his medicine free, and, with the universal craving for bottles of medicine of the hypochondriacs of the English masses, the waste which exists under the panel system would be multiplied. This point entirely escaped the Minister of Health when he claimed that when the cash relationship between doctor and patients disappeared the doctors would devote their time to patients who really needed them, instead of to wealthy hypochondriacs. What his service will do is to render general, because free, indulgence in hypochondria.

Gerontologic Conference

A conference of the British Society for Research on Aging will be held at the Royal Society of Medicine, London, on July 7 from 10 a. m. to 6:30 p. m. Papers on the result of their gerontologic researches will be read by Sir Frederick Bartlett, F. R. S., Prof. E. C. Dodds, F. R. S., F. Bourliere (Paris), L. Cosin, F. A. Denz, E. Geiringer, V. Korenchevsky, O. Olbrich, H. Brown and M. H. Ferguson, and Professor Beltran-Baguena (Valencia University).

British Surgeon Visits Australia

Early this year the first Sims Commonwealth Professor of the Royal College of Surgeons, Sir Hugh Cairns, visited Australia and New Zealand, where he delivered many lectures, conducted clinics and attended conferences. He has presented a report to the College. Perhaps the most important result is his suggestion that the time has come to found medical fellowships for graduates in Britain to do postgraduate work in Australia and New Zealand, where there are experts well known all over the world. It is hoped that in time medical teachers and research workers will be freely exchanged between all parts of the Commonwealth.

ITALY

(From Our Regular Correspondent)

FLORENCE, June 19, 1948.

Surgical Treatment of Pulmonary Tuberculosis

At the National Congress, the Italian Surgical Association gave extensive consideration to the surgical treatment of pulmonary tuberculosis. The first speaker, Prof. N. Di Paola, discussed intrapleural pneumonolysis and surgical intervention on the phrenic nerve. The cutting of adhesions, or pneumonolysis, is clinically important because their presence favors recurrence of the lesions which were stabilized after treatment by pneumothorax; its performance seems advisable also in those cases in which pneumothorax is ineffective. Depending on the type of adhesion (simple or complex), the indications may be those of necessity, of urgency or of security; it is the author's definite concept that all types of adhesions should be cut. He stated that the pressure of the pneumothorax should be graduated so that the adhesions appear well delineated before the intervention. The instrument should be one with a handle and independent optics. The postoperative management is of great importance for the Jacobaeus operation. Failures and complications may be caused by defects of technic and by incongruous pneumothoracic treatment in the immediate postoperative period. Among 1,460 cases in which the operation was performed, 84 per cent were without any complication; in 13 per cent there occurred a temporary circumscribed pleurisy; chronic tuberculous empyema occurred in about 1 per cent, and emphysema was manifested in 0.6 per cent.

In discussing surgical intervention on the phrenic nerve, the speaker demonstrated that the results correspond to the topography and to the anatomicopathologic type of the lesions. For apical lesions it is wrong to depend on the autonomous phrenicoexeresis; it is much better to perform at once a thoracoplasty or an extrapleural pneumothorax. On the contrary, the parahilar lesions present a good indication. The basal lesions do not constitute any indication of choice. Some satisfactory results have been obtained by combining phrenicoexeresis with unilateral pneumothorax and phrenicoexeresis with pneumoperitoneum. The speaker condemned the prethoracoplastic phrenicoexeresis and considered it favorable to cut the phrenic nerve after the thoracoplasty in cases of apicocaudal bronchopneumonic aspiration. He was not enthusiastic about phrenicoexeresis as a satisfactory treatment by itself. He considered it safe to assume that in a few, well determined circumstances, a small number of permanent good results may be obtained by surgical intervention on the phrenic nerve.

Professor Biancalana discussed scaleniotomy, pneumonolysis and surgical extrapleural pneumothorax. Scaleniotomy has been abandoned as a surgical treatment by itself, but represents one stage of upper thoracoplasty. Pneumonolysis with plumbage has been abandoned completely since the advent of modern thoracoplasty; only pneumonolysis combined with the filling of collapsed lung cavities with paraffin has survived, and this finds its indications in persons of a certain age and as a preparatory treatment for thoracoplasty in patients with large cavities with considerable secretion, or as a supplementary treatment to thoracoplasty in patients with residual cavities. The combination of apicolysis with thoracoplasty may be employed to obtain better release of the apex of the lungs and, consequently, a much higher percentage of closure of cavities.

In surgical extrapleural pneumothorax the extensive detachment of the parietal pleura provokes collapse of the lung, which may be maintained by supplying more air. The intervention is fairly easy and well tolerated by the patients, but at first

many failures and complications occurred. The results were improved by perfecting the operative technic and postoperative management and by a better selection of cases. One characteristic of the intervention is the reversibility of the collapse; reexpansion of the lung may be obtained after three or more years when the extrapleural pneumothorax is discontinued.

Professor Ruggieri reported on thoracoplasty, lobectomy and pneumonectomy. The principal types of thoracoplasty are simple partial upper thoracoplasty; partial upper thoracoplasty with complementary apicolysis, total and subtotal thoracoplasty and anterolateral thoracoplasty according to Monaldi. In criticizing each type of intervention, the speaker said that there is no standard operation which may be adopted independently of the infinite variety of tuberculous lesions; on the contrary, the intervention must be adapted to the morbid process in each case. In deciding to do a lobectomy or pneumonectomy it is absolutely necessary to use much caution; however, these procedures should have a definite place in the surgical therapy of pulmonary tuberculosis, since their usefulness is beyond doubt in some forms of the disease.

The last report on the subject was presented by Professor Omodei Zorini of the University of Rome. His personal experience gives evidence of the possibility of total reexpansion of the lung after the extrapleural pneumothorax has been discontinued, and of the usefulness of combining it with treatment with penicillin and streptomycin, to avoid suppurative complications. The extrapleural pneumothorax may be considered a satisfactory accomplishment by modern phthisiology.

The speaker is opposed to thoracoplasty even if the pleura is left untouched. He considers preventive phrenicoexeresis as harmful in many cases of upper cavities and of bilateral lesions, in which it is necessary to spare the function of the diaphragm.

With Bottari and Di Paola, Professor Zorini presented 7 cases of large cavities with much secretion, in which recovery was obtained from treatment by collapse of the lobe. This method suggested by Bottari consists of the combined endocavitary aspiration and administration of streptomycin into the cavity and also parenterally before and after an apicoaxillary and posterior thoracoplasty. By this procedure one may be successful in obtaining a rapid and complete collapse of the entire diseased lobe of the lung.

OSLO

(From Our Regular Correspondent)

July 8, 1948.

Health Passports

It would be helpful for all concerned if everyone had a written health record to show the last physician consulted. In 1946, Dr. Evang, head of the Norwegian Public Health Service, appointed a committee to inquire into the problem of health passports. A year later this committee issued its recommendations. At the school-leaving age, but not earlier, everyone should be supplied with a booklet in which every fact of major importance concerning the owner's health should be entered. Finding that the health passports already in tentative use in Norway do not satisfy requirements, the committee drafted a 16 page health passport of its own.

A copy of this booklet has been issued with every number of the *Journal of the Norwegian Medical Association* for May 1, 1948. In the same issue Dr. Evang gives a brief account of health passports in general. He concludes: "Before the plan of introducing health passports is promoted, it would be desirable to have comments on the present draft from as many as possible of the country's doctors." In subsequent issues of the same journal several physicians have taken Dr. Evang at his word and aired their not always favorable opinion of his infant. As was to be expected, the chief stumbling block concerns the diseases one prefers to keep to himself, notably the venereal diseases. But there are other diseases, such as tuberculosis, the presence of which one does not wish to publish from the housetops. Yet the advantages of a health passport are so great that it is hoped that Dr. Evang will succeed, so that even the most captious critic will hail it as an essential feature of the campaign for better health.

The Costly and Wasteful M.D. Degree

Few physicians in Norway are entitled to the degree of Doctor of Medicine. This is so because one must be endowed with ample means, brains, ambition, leisure, vitality and other more or less essential equipment for the long march which may or may not ultimately give one the much coveted degree. Is it worth while? If it is, ought not something radical be done to improve this institution? To be sure, a special committee is at present engaged on the "reform of the M.D.," but it is not known when its recommendations will be published.

The faults of the present system were recently exposed with blunt candor by Dr. Thjøtta, Professor of Bacteriology at the University of Oslo, on the occasion of a graduation ceremony for the M.D. degree. These were his points: The printing alone of an M.D. thesis recently cost its author Kr. 16,000 (over $3,000). M.D. theses are apt to be stuffed with quotations dragged in to demonstrate the author's erudition. The valuable time of the experts who have to pass judgment on one such *magnum opus* after another every year is frittered away, and their own research work is handicapped. As Professor Thjøtta remarked: "Everyone will see that one cannot expect much scientific work from the Norwegian Professors of Medicine in these circumstances."

But what was, perhaps, Professor Thjøtta's most important point was that the present system for attaining the M.D. degree is a real check on scientific team work in Norway. For the prospective Doctor of Medicine must work out a problem all by himself, although it would have been much better dealt with by a team composed of, say, a pathologist, a clinician, a bacteriologist and others. The one horse show is today an anachronism.

Prevention of Tuberculosis in the Fighting Services

On paper at any rate, the machinary for keeping tuberculosis out of the Norwegian fighting services is almost fool proof. Every new recruit is subjected to a searching medical examination, including tuberculin tests and a radiologic examination of the lungs. At intervals of three months, the radiologic examination is repeated and negative reactors to tuberculin are tested anew. When, in spite of these precautions, a member of the fighting services is found to be tuberculous, all who have recently been in contact with him are examined. Recruits found to have negative reactions to tuberculin are recommended for BCG vaccination which, voluntary in the past, can now be enforced.

Professor Axel Ström, who is the highest authority on the subject in Norway and largely responsible for the health of the fighting services, has given an account of an outbreak of tuberculosis in the Norwegian navy. A recruit suffering from cavernous pulmonary tuberculosis and with tubercle bacilli in his sputum was not recognized as having tuberculosis until he had infected several of his companions, 65 of whom reacted in some way or other to the infection. Twenty-five of them merely became tuberculin-positive; another 25 became tuberculin-positive and also presented hilar adenitis. In 3 erythema nodosum developed; pleurisy developed in 5, pulmonary infiltration in 6 and pulmonary infiltration with cavity formation in 1. Professor Ström refers to many other similar incidents, some of which also assumed epidemic proportions. The weakest link in the chain is the fact that the tuberculin-negative recruit who is vaccinated with BCG on joining does not become allergic to tuberculin until several weeks later, and in the meantime he may contract tuberculosis. The remedy Professor Ström proposes in this connection is the tuberculin test and BCG vaccination of negative reactors before they are called up. Now that BCG vaccination is compulsory in Norway, it ought to be possible to give effect to this proposal.

Council on Medical Education and Hospitals

AMENDED INTERN PLACEMENT PLAN

Paragraphs three and four of the Uniform Intern Placement Plan, as published in THE JOURNAL, March 6, 1948, have been amended for clarification by the joint action of the Council on Medical Education and Hospitals of the American Medical Association, the Association of American Medical Colleges, the American Hospital Association, the Protestant Hospital Association and the Catholic Hospital Association. The following is the full text of the amended plan:

PLAN FOR THE YEAR 1948-1949 FOR INTERNSHIPS BEGINNING JULY 1, 1949

1. Applications and credentials to be submitted only through the dean's office to hospitals, with the date for filing applications and release of credentials by the medical schools set at Oct. 15, 1948. Credentials ordinarily will consist of an executed application blank and a letter from the dean but do not preclude such letters from members of the faculty as they may wish to write, unsolicited by the candidate.

2. Applicants may visit hospitals and be interviewed by hospital intern committees, but the hospital administration shall not commit the hospital or obligate the applicant, or potential applicants, before Nov. 15, 1948.

3. No intern appointments shall be tendered prior to Nov. 15, 1948 to applicants who are members of the senior class in medical schools. Notice by telegram is preferable. Hospitals may decline an applicant at any time.

4. Applicants shall send acceptances or rejections of appointments so that they are received at the hospital by midnight of Nov. 18, 1948; but commitments by applicants shall not be required prior to that time.

5. These regulations shall apply only to undergraduate medical students who have not completed the fourth year of their medical course.

The previous wording of the amended paragraphs was as follows:

3. No intern appointments shall be made prior to Nov. 15, 1948, from applicants who are members of the senior class in medical school. Hospitals may decline an applicant at any time.

4. Applicants shall accept or reject hospital appointments before midnight of Nov. 18, 1948.

Medical Examinations and Licensure

COMING EXAMINATIONS AND MEETINGS

EXAMINING BOARDS IN SPECIALTIES

AMERICAN BOARD OF ANESTHESIOLOGY: *Written*. Various Centers, Jan. 21, 1949. Final date for filing application is Oct. 1. *Oral*, Philadelphia, Oct. 10. Sec., Dr. Paul M. Wood, 745 Fifth Ave., New York 22.

AMERICAN BOARD OF INTERNAL MEDICINE: *Written*. Oct. 18. Asst. Sec., Dr. W. A. Werrell, 1 W. Main St., Madison 3, Wis.

AMERICAN BOARD OF NEUROLOGICAL SURGERY: *Oral*. Chicago, June 1949. Final date for filing application is Jan. 1949. Sec., Dr. W. J. German, 310 Cedar Street, New Haven, Conn.

AMERICAN BOARD OF OBSTETRICS AND GYNECOLOGY: *Part I*. Various Centers, Feb. 4, 1949. Final date for filing application is Nov. 1. Sec., Dr. Paul Titus, 1015 Highland Bldg., Pittsburgh 1.

AMERICAN BOARD OF OPHTHALMOLOGY: *Oral*. Chicago, Oct. 6. *Written*, Various Centers, January 1949. Sec., Dr. S. J. Beach, 56 Ivie Rd., Cape Cottage, Maine.

AMERICAN BOARD OF ORTHOPEDIC SURGERY: *Part II*. Chicago, January 1949. Final date for filing application is August 15. Sec., Dr. Francis M. McKeever, 1136 W. 6th St., Los Angeles 14.

AMERICAN BOARD OF OTOLARYNGOLOGY: *Oral*. Chicago, Oct. 5-8. New York City, Spring, 1949. Sec., Dr. D. M. Lierle, University Hospital, Iowa City.

AMERICAN BOARD OF PATHOLOGY: Chicago, Oct. 8-9. Final date for filing application is Oct. 1. Sec., Dr. Robert A. Moore, 307 Euclid Ave., St. Louis.

AMERICAN BOARD OF PEDIATRICS: *Oral*. Seattle, Sept. 10-12. Atlantic City, Nov. 17-19. Sec., Dr. Lee F. Hill, 718 Royal Union Bldg., Des Moines, Iowa.

AMERICAN BOARD OF PLASTIC SURGERY: Examinations are given in June and November of each year in the hometown of applicants. Sec.-Treas., Dr. Louis T. Byars, 400 Metropolitan Bldg., St. Louis, Mo.

AMERICAN BOARD OF RADIOLOGY: Nov. Final date for filing application is Sept. 1. Sec., Dr. B. R. Kirklin, 102-110 Second Ave., S.W. Rochester, Minn.

AMERICAN BOARD OF SURGERY: *Written*. Various Centers, March 1949. Final date for filing application is Dec. 1. Sec., Dr. J. S. Rodman 225 S. 15th St., Philadelphia.

AMERICAN BOARD OF UROLOGY: Chicago, Feb. 12-16, 1949. Final date for filing application is Sept. 1. Sec., Dr. Harry Culver, Route $13, Sunnyside Rd., Minneapolis 4.

BOARDS OF MEDICAL EXAMINERS

ALABAMA: *Examination*. Montgomery, June 28-30, 1949. Sec., Dr. D. G. Gill, 319 Dexter Ave., Montgomery.

ALASKA: * *Examination*. Juneau, Sept. 7. Sec., Dr. W. M. Whitehead, Box 140, Juneau.

ARKANSAS: *Eclectic Examination*. Little Rock, Nov. 4. Sec., Dr. C. H. Young, 1415 Main St., Little Rock.

CALIFORNIA: *Oral*. Los Angeles, Nov. 20-21. *Written*, Sacramento, Oct. 18-21. Sec., Dr. Frederick N. Scatena, 1020 N Street, Sacramento 14.

CONNECTICUT: * *Examination*. Hartford, Nov. 9-10. Sec., Dr. Creighton Barker, 258 Church St., New Haven.

DISTRICT OF COLUMBIA: * *Reciprocity*. Washington, Sept. 13. Sec., Commission on Licensure, Dr. G. C. Ruhland, 4130 Municipal Bldg., Washington, D. C.

GEORGIA: *Examination*. Atlanta, Oct. 12-13. *Endorsement*, Atlanta, Oct. 14. Sec., Mr. R. C. Coleman, 111 State Capitol, Atlanta.

ILLINOIS: Chicago, Oct. 5-7. Supt., Dept. of Registration and Education, Mr. Fred W. Ruegg, Capitol Bldg., Springfield.

INDIANA: *Examination*. Indianapolis, June 1949. Sec., Box 1 of Medical Registration & Examination, 416 K. of P. Bldg., Indianapolis.

IOWA: * *Examination*. Des Moines, Dec. 6-8. *Endorsement*, Des Moines, Oct. 4. Sec., Dr. M. A. Royal, 506 Fleming Bldg., Des Moines.

KANSAS: Topeka, Dec. 13-16. Sec., Board of Medical Registration & Examination, 905 N. 7th St., Kansas City.

MAINE: Portland, Nov. 9-10. Sec., Board of Registration of Medicine, Dr. Adam P. Leighton, 192 State St., Portland.

MARYLAND: *Examination*. Baltimore, Dec. 14-17. *Endorsement*. At the discretion of the Board. Sec., Dr. Lewis P. Gundry, 1215 Cathedral St., Baltimore.

MINNESOTA: Minneapolis, Oct. 19-21. Sec., Dr. J. F. DuBois, 230 Lowry Medical Arts Bldg., St. Paul 2.

MONTANA: Helena, Oct. 4-6. Sec., Dr. O. G. Klein, First Nat'l Bank Bldg., Helena.

NEVADA: Carson City, Nov. 1. Sec., Dr. G. H. Ross, Industrial Bldg., Carson City.

NEW HAMPSHIRE: Concord, Sept. 9. Sec., Board of Registration in Medicine, Dr. J. S. Wheeler, Room 107, State House, Concord.

NEW JERSEY: *Examination*. Trenton, Oct. 19-22. Sec., Dr. E. S. Hallinger, 28 W. State St., Trenton.

NEW MEXICO: * Santa Fe, Oct. 11-12. Sec., Dr. V. E. Berchtold, 141 Palace Ave., Santa Fe.

NEW YORK: *Examination*. Various Centers, Sept. 27-30. Sec., Dr. J. L. Lochner, Jr., 23 South Pearl St., Albany 7.

OHIO: *Examination*. Columbus, Dec. *Endorsement*. Columbus, Oct. 25. Sec., Dr. H. M. Platter, 21 W. Broad St., Columbus.

PENNSYLVANIA: *Examination*. Philadelphia, Jan., 1949. Act. Sec., Mrs. M. G. Steiner, 351 Education Bldg., Harrisburg.

PUERTO RICO: *Examination*. Santurce, Sept. 7-11. Sec., Mr. Luis Cueto Coll, 22 Parada, Box 3717, Santurce.

RHODE ISLAND: * *Examination*. Providence, Oct. 7-8. Chief, Div. of Professional Regulation, Mr. Thomas B. Casey, 366 State Office Bldg., Providence.

SOUTH CAROLINA: *Endorsement*. Sept. 6. Sec., Dr. N. B. Heyward, 1329 Blanding St., Columbia.

TEXAS: Fort Worth, Nov. 4-6. Sec.-Treas., Dr. M. H. Crabb, 1305 Amicable Bldg., Waco.

VIRGINIA: *Examination*. Richmond, Dec. 3-4. *Endorsement*. Dec. 2. Sec., Dr. K. D. Graves, 30½ Franklin Road, Roanoke.

WEST VIRGINIA: Charleston, Oct. 4-6. Comm., Public Health Council, Dr. N. H. Dyer, State Dept. of Health, Charleston.

WISCONSIN: * Madison, Jan. 11-13, 1949. Sec., Dr. C. A. Dawson, Tremont Bldg., River Falls, Wis.

WYOMING: *Examination*. Cheyenne, Oct. 4. Sec., Dr. G. M. Anderson, Capitol Bldg., Cheyenne.

* Basic Science Certificate required.

BOARDS OF EXAMINERS IN THE BASIC SCIENCES

ALASKA: Juneau. Last week in Aug. Sec., Dr. C. Earl Albrecht, Box 1931, Juneau.

ARIZONA: *Examination*. Tucson, Sept. 21. Sec., Mr. Francis A. Roy, Univ. of Arizona, Tucson.

COLORADO: *Examination*. Denver, Sept. 15-16. Sec., Dr. Esther B. Starks, 1459 Ogden St., Denver 3.

CONNECTICUT: *Examination*. Oct. 9. Exec. Asst., Mary G. Reynolds, 110 Whitney Ave., New Haven 10.

DISTRICT OF COLUMBIA: *Examination*. Washington, Oct. 18-19. Sec., Dr. G. C. Ruhland, 4130 Municipal Bldg., Washington, D. C.

FLORIDA: *Examination*. Gainesville, Nov. 6. Final date for filing application is Oct. 25. Mr. M. W. Emmel, University of Florida, Gainesville.

IOWA: Des Moines, Oct. 12. Sec., Dr. Ben H. Peterson, Coe College, Cedar Rapids.

MICHIGAN: *Examination*. Ann Arbor and Detroit, Oct. 8-9. Sec., Miss Eloise LeBeau, 1510 West Allegan St., Lansing.

MINNESOTA: *Examination*. Oct. 5-6. Sec.-Treas., Dr. Raymond N. Bieter, 105 Millard Hall, Univ. of Minnesota, Minneapolis.

NEBRASKA: *Examination*. Omaha, Oct. 5-6. Dir., Bureau of Examining Boards, Mr. Oscar F. Humble, Room 1009 State Capitol Bldg., Lincoln.

OKLAHOMA: Spring of 1949. Sec., Dr. Clinton Gallaher, 813 Braniff Bldg., Oklahoma City.

OREGON: *Examination*. Portland, Sept. 4. Sec., Basic Science Examining Committee, Dr. C. D. Byrne, Univ. of Oregon, Eugene.

SOUTH DAKOTA: *Examination*. Vermillion, Dec. 3-4. Sec., Dr. G. M. Evans, Yankton.

TENNESSEE: *Examination*. Memphis & Nashville, Sept. 20-21. Sec., Dr. O. W. Hyman, 874 Union Ave., Memphis.

WISCONSIN: *Examination*. Madison, Sept. 25. Final date for filing application is Sept. 18. Sec., Prof. W. H. Barber, Scott & Watson Sts., Ripon.

Bureau of Legal Medicine and Legislation

MEDICOLEGAL ABSTRACTS

Malpractice: Abandonment of Patient Without Notice.—The plaintiffs, father and son, sued the defendant physician for damages for alleged malpractice resulting in the loss of the son's leg. From judgments for both plaintiffs, the defendant appealed to the Supreme Court of Appeals of Virginia.

The son fractured his leg in a football game on Oct. 19, 1944, and was taken to the Norfolk General Hospital. It was a simple fracture with slight comminution or splintering. The boy's father engaged the services of the defendant physician, who reduced the fracture and set the leg in a plaster of paris cast in the customary way, with the padding and gauze between the leg and the cast. The next day, when the defendant saw the boy, he was told that the son was suffering excruciating pain in the injured leg and that he had no feeling in his toes. The defendant, according to the plaintiffs' evidence, made no examination of the cast and did nothing about it, however. On October 20 both father and son made a similar complaint. The pain in the ankle had become continuous and unendurable, and the physician was told that there was a throbbing sensation in the patient's ankle, that it felt as though a tight band were around it and that he had no feeling in his toes. The father suggested that the cast was too tight, but the defendant, in very emphatic language, said that it was not. However, he made no examination of the cast or leg and did nothing to alleviate the pain. On October 22, which was Sunday, the defendant left the city for a week, without advising either the patient or his parents of his intention to leave. He did not make any provision for the patient during his absence and did not communicate with him or leave any instructions for any other physician to take care of the case while he was away.

On October 21, the day of the defendant's last visit before leaving town the patient's temperature was 101 F.; at 8 a. m. it was 100.8 F. His temperature had been normal at midnight on October 19, but rose to 101.6 F. at 4 p. m. on October 20; four hours later it was 100.8 F. These temperatures were noted on the chart of the patient. The chart discloses that on October 21 the white blood cell count was 16,000 and the neutrophil count 77 per cent. For twenty-four hours prior to the defendant's last visit to his patient on October 21 the patient had been given morphine on five separate occasions for the alleviation of the pain. On the night of October 21 the son's temperature varied from normal to 102 F., and during the next four days it fluctuated, sometimes being subnormal and at other times up to 103 F. The pain in the ankle was not alleviated by the administration of morphine. On October 30, when the defendant returned, he was again requested to examine the cast and leg, but declined to do so and on the same day discharged the patient from the hospital. The patient was carried to his home at Virginia Beach on October 31 and confined to his bed. The rise in temperature persisted, and he continued to endure extreme pain in his ankle. The father called the defendant on November 7, informed him of the condition of the patient and requested him to see him. The physician refused and told the father that there was nothing wrong with the boy's leg. While the defendant was away, and following his later refusal to see the patient, the patient was treated by Dr. Simpson, another orthopedic surgeon. He testified that the cast was completely bivalved on November 7, for the purpose of relieving all pressure, and that the necrosis was caused by pressure on the nerves, created by the cast. He stated that the possibility of swelling, with the result that the cast might become too tight, even though it were originally properly applied, should be anticipated by a physician and that any unyielding cast applied to a broken limb ought to be viewed with suspicion and examined to see whether it had become too tight. The cast was subsequently removed, on November 27. From that time until July 1946, when it was finally amputated, the leg became progressively worse, and the plaintiff was at no time able to use it.

There was medical testimony that the patient was not in proper condition to have been discharged from the hospital on Oct. 21, 1944, at which time the defendant authorized the discharge. There was medical testimony to the effect that on October 21, the last day on which the defendant saw his patient before leaving on his trip, there was an indication that an infection existed and that a physician with an average degree of learning and skill, practicing in the community, should have attempted to ascertain the cause of the infection and especially should have examined the injured leg and the cast. There was medical testimony to the effect that if a physician intends to leave a case it is his duty to notify the patient, or his parents in this case, of his intention to leave and that he should make some provision to put his patient in charge of some reputable physician. Finally, there was medical testimony to the effect that the amputation of the patient's leg was due to a continuation of the same conditions as were brought about by the swelling of the leg and the failure of the defendant promptly to relieve the pressure by removing or cutting the cast.

The defendant contended that there was no evidence to sustain the verdicts of the jury and that they were founded only on sympathy for the unfortunate boy who lost his leg and for the father who had incurred large expenses. He argued that when he left on October 22 the boy was in the hospital receiving good treatment from the interns and nurses and on October 24 was directly under the supervision and care of Dr. Simpson, an orthopedic surgeon of high standing, and insisted that if he, the defendant, had been in attendance he could have done no more for the patient than was done. He further contended that the fracture was properly reduced and the cast properly applied. The plaintiffs do not claim, said the court, that the fracture was not properly reduced or that the cast was improperly applied. The plaintiffs' contention is that after the application of the cast the defendant neglected to pay heed to certain conditions that arose in a very short time after the cast was applied and, without giving the patient or his father any notice and without securing another physician for the boy, left the city and did not return for eight or nine days, during which time the condition of the patient grew progressively worse.

In cases of this nature, said the Supreme Court, there is no difficulty about the law. It is simple and well settled, although not always easy of application. A physician is not a warrantor or insurer of a cure. His contract is to treat the patient with reasonable diligence and skill. After a physician has accepted employment in a case it is his duty to continue his services as long as they are necessary. He cannot voluntarily abandon his patient. Even if personal attention is no longer necessary in the treatment of an injured limb, the physician, if the case calls for it, must furnish the patient with instructions as to care, and his failure to do so might become actionable negligence.

From the evidence, the Supreme Court continued, the jury reasonably could have found the defendant guilty of actionable negligence in several respects. It could have concluded that on October 20 and 21 the physician should have rendered some kind of treatment when he was notified by the father and the boy of the great pressure of the cast and of the excruciating pain. Failure or refusal to see the patient from October 21 to 30, which was a very critical period, could have been found by the jury to be negligence which proximately contributed to the patient's great pain and suffering and the eventual loss of his leg. The failure or refusal of the defendant to render any treatment after he had been advised of the serious condition of the patient and then sending him home without making any future provision or giving any directions for his care and treatment might have afforded reasonable grounds for the jury to have found negligence on the physician's part in those respects. Finally, on November 7, the defendant failed to respond to the call for medical assistance made by the father for the boy when the physician, by his own admission, had not released the case nor had he been discharged from the obligations he assumed when he took the case. At that time it was his duty to continue attending and treating the patient. His failure in this respect might have been found to have been negligence. We are of the opinion, concluded the Supreme Court of Appeals, that the evidence sufficiently supports the verdicts. Accordingly the judgments in favor of both plaintiffs were affirmed. *Vann v. Harden (two cases), 47 S. E. (2d) 314 (Va., 1948).*

Current Medical Literature

AMERICAN

The Association library lends periodicals to members of the Association and to individual subscribers in continental United States and Canada for a period of three days. Three journals may be borrowed at a time. Periodicals are available from 1937 to date. Requests for issues of earlier date cannot be filled. Requests should be accompanied with stamps to cover postage (6 cents if one and 18 cents if three periodicals are requested). Periodicals published by the American Medical Association are not available for lending but can be supplied on purchase order. Reprints as a rule are the property of authors and can be obtained for permanent possession only from them.

Titles marked with an asterisk (*) are abstracted below.

American J. Digestive Diseases, Fort Wayne, Ind.

15:73-108 (March) 1948

Psychosomatic Aspects of Peptic Ulcer. H. Gauss. -p. 73.
Effect of Salicylate Medication upon Urinary Excretion of Vitamin C. J. M. Spitzer and S. Shapiro. -p. 80.
Leiomyosarcoma of Stomach with Particular Reference to Gastroscopic Picture. E. D. Palmer. -p. 84.
Diagnostic Technics in Diarrhea. A. J. Cantor. -p. 88.
Observations on Acute Allergic Gastritis. T. C. Afendoulis. -p. 90.
*Increased Sugar Tolerance as Factor in Production of Sympton Complex Simulating Peptic Ulcer, Neuro-Circulatory Asthenia, and Psychoneurosis. A. R. Peskin. -p. 92.

Increased Sugar Tolerance in a Syndrome Simulating Peptic Ulcer.—Peskin reports 4 cases in which vague symptoms of a bizarre character were experienced by the patients for several years. Some had a family history of similar complaints. The symptoms were: nervousness, palpitation apprehension, weakness in the legs, tremors, excessive perspiration, mental dulness and hunger pains relieved by food. The symptoms were aggravated or precipitated by physical effort and were prevented or relieved by eating and rest. A study of sugar tolerance suggested itself from the similarity of these symptoms to those of hypoglycemia. Confirmation of the observation that these symptoms were due to relative hypoglycemia was obtained by reproduction of the same symptoms with insulin and exercise. At a relatively high blood sugar level (88 mg. per hundred cubic centimeters) patient began to have such symptoms as tremor, air hunger and discomfort in the pit of his abdomen. More severe symptoms were evident at 74 mg. of blood sugar. A disappearance of symptoms took place with the administration of orange juice. For the prevention and relief of this disturbance the author recommends a high fat and high protein diet. He stresses the practical value of the search for this entity in such obscure diseases as neurocirculatory asthenia, psychoneurosis and peptic ulcer syndrome without positive roentgenologic observations. The role of the liver and thyroid efficiency in the maintenance of a so-called normal sugar tolerance is mentioned. These patients disclosed mild dysfunction of liver and thyroid.

American Journal of Physiology, Baltimore

152:1-218 (Jan.) 1948. Partial Index

Protection Against Accelerator Forces by Carbon Dioxide Inhalation. L. Van Middlesworth and R. F. Kline. -p. 22.
Volume Measurement of Islets of Langerhans and Effects of Age and Fasting. R. E. Haist and E. J. Pugh. -p. 36.
Arterio-Venous Anastomoses in Liver, Spleen and Lungs. H. Prinzmetal, E. M. Oraitz Jr., B. Simkin and H. C. Bergman. -p. 48.
Some Actions of Potassium Chloride at Neuromuscular Junction. M. Altamirano and F. Bridebro. -p. 53.
Effects of Isotonic Solutions and of Sulfates and Phosphates on Distribution of Water and Electrolytes in Human Blood. P. H. Held, A. J. Heinsen and J. P. Peters. -p. 77.
Effect of Acetylcholine, Caffeine and Alkaloids on Activity of Muscle Adenosinetriphosphatase. Clara Torda and H. G. Wolff. -p. 86.
Measurement of Alveolar Pressure in Human Subjects. A. B. Otis and D. F. Proctor. -p. 106.
Causes of Skin Cooling in Pressure Breathing, Deep Inspiration and Deep Expiration. V. De Lalla Jr. -p. 122.
Cardiovascular Response to Posture and Problem of Faintness and Syncope in Semi-Starved Individual. H. L. Taylor, A. Henschel and A. Keys. -p. 141.
Pulse Rate Responses to Acceleration Under Reduced Barometric Pressure. L. Van Middlesworth. -p. 157.
Physiologic Studies of Effects of Intermittent Positive Pressure Breathing on Cardiac Output in Man. A. Cournand, H. L. Motley, L. Werko and D. W. Richards Jr. -p. 162.
Effect of Xanthopterin on Cell Proliferation in Bone Marrow Cultures. E. R. Norris and J. J. Hajnerich. -p. 175.
Maintenance of Vasodilatation of Extremities of Normal Individuals for Prolonged Period by Ingestion of Two to Four Substantial Meals in Close Succession. Grace M. Reed and C. Sheard. -p. 183.
Distribution of Estradiol Between Serum and Red Cells. F. Bischoff and R. E. Katherman. -p. 189.
Hereditary Obesity and Temperature Regulation. Margaret L. Turner. -p. 197.
Physiologic Icterus of Newborn. A. Lucey and L. W. Freeman. -p. 205.
Production of Ketosis by Growth and Adrenocorticotropic Hormones. L. L. Bennett, Ruth E. Kreiss, C. H. Li and H. M. Evans. -p. 210.
Effect of Inorganic Phosphate on Glycolysis of Human Blood. A. J. Heinsen. -p. 216.

Am. J. Syphilis, Gonorrhea and Ven. Dis., St. Louis

32:99-202 (March) 1948. Partial Index

*Treatment of Gonococcal Infection with Micronized Penicillin by Inhalation. G. V. Taplin and H. T. Thompson. -p. 124.
Ambulatory Treatment of Gonorrhea with Penicillin Preparations: Experiences with Various Preparations and Techniques. A. Jacoby, A. Ollswang, J. Freund and T. Rosenthal. -p. 133.
Comparison of Twenty-Four-Hour and Forty-Eight-Hour Readings of Routine Gonococcus Cultures. Adelaide M. Mueller and E. Ellen Nell. -p. 139.
*Bacteriologic Follow-Up of Penicillin-Treated Gonorrhea in Women. Nell Hirschberg. -p. 141.
Cultural and Serologic Studies on Granuloma Inguinale. W. Dunham and G. Rake. -p. 145.
Antigenic Relationships of Donovania Granulopatis (Anderson) and Significance of This Organism in Granuloma Inguinale. G. Rake. -p. 150.
*Treatment of Granuloma Inguinale with Streptomycin. H. L. Hirsh and S. R. Taggart. -p. 159.

Inhalation of Micronized Penicillin for Gonococcal Infections.—Taplin and Thompson say that inhalation of micronized penicillin-glucose or penicillin-plasma mixtures have produced therapeutic concentrations in the blood and urine for more than twenty hours following single inhalations of 200,000 to 300,000 units. Aerosol penicillin inhalations give results similar to intramuscular administration with penicillin-saline solutions. The authors show the apparatus that is used for the administration of micronized penicillin by inhalation and say that 18 of 25 patients with acute gonorrhea who have been treated with inhalation of penicillin were cured clinically and bacteriologically and 3 others were cured clinically, but complete bacteriologic follow-up beyond the first forty-eight or seventy-two hour determinations was impossible to obtain. There were 4 so-called mechanical failures; i.e., patients did not receive the

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total dosage because of inability to use the large apparatus properly. Retreatments of these 4 failures resulted in three cures and 1 failure. The authors think that this method could cure all but the most stubborn infections.

Penicillin Therapy of Gonorrhea in Women.—Hirschberg made follow-up studies for one to fourteen weeks on 54 women with gonorrhea who were treated with 150,000 units of penicillin in beeswax and peanut oil. There were failures of penicillin treatment in 2 patients. The first of these showed a positive culture seven weeks after receiving 150,000 units of penicillin, the second three weeks after 450,000 units and two weeks after a second treatment of 150,000 units of penicillin. Cultures remained negative after a third dose of 300,000 units. This indicates the importance of follow-up cultures as a criterion of cure.

Streptomycin in Granuloma Inguinale.—Hirsch and Taggart employed streptomycin in 21 patients with granuloma inguinale. The total daily dose was 1 Gm. given intramuscularly in equally divided doses at four hour intervals for periods ranging from six to forty-seven days. Administration of the antibiotic was continued until there was evidence of complete healing of the lesions. The rapidity with which the lesions healed was dependent on their extent and on whether there were moist, ulcerative lesions which were apposed or bathed by vaginal discharge. The Donovan bodies were found to have disappeared from the lesions between the seventh and fourteenth day of therapy. There have been no relapses in the patients followed for up to fourteen weeks. Streptomycin appears to be the drug of choice in the treatment of granuloma inguinale.

American Journal of Tropical Medicine, Baltimore

28:175-348 (March) 1948. Partial Index

Inquiry into Ectopic Lesions in Schistosomiasis. E. C. Faust. -p. 175.
Control of Phlebotomus in Peru with DDT. H. Hertig and G. B. Fairchild. -p. 207.
Studies on Susceptibility of Neotropical Rodents to Different Strains of Yellow Fever Virus. H. W. Loomoert Jr. -p. 231.
Dengue Vector on New Caledonia, New Hebrides, and Solomon Islands. W. J. Perry. -p. 253.
Isospora Infections in Man. A. A. Liebow, N. T. Milliken and Clair A. Hanson. -p. 261.
Pathology of Kala-Azar: Report of Case. J. M. Lubitz. -p. 275.
New Reaction for Diagnosis of Kala-Azar: Preliminary Report. C. Trinção. -p. 287.
Strongyloides Fülleborni Infection in Man. F. G. Wallace, R. D. Mooney and A. Sanders. -p. 299.
Infectivity of Native Malarias in South Carolina to Anopheles Quadrimaculatus. W. D. Young, N. F. Hardman, R. W. Burgess and others. -p. 303.
Outbreak of Typhus of Murine Type: First Report from Isthmus of Panama. C. Calero -p. 313.
Mass Destruction of Adult Anophelines by DDT as Suggested Malaria Control Measure: Preliminary Report. O. K. Fletcher Jr. and J. B. Krouse II. -p. 323.

Bulletin of Johns Hopkins Hospital, Baltimore

82:357-428 (March) 1948

Relation of Dosage Schedule to Therapeutic Efficiency of Streptomycin in Treatment of K. Pneumoniae Infections in Mice. C. G. Zubrod. -p. 357.
Studies on Schistosomiasis Japonica in Philippine Islands: Clinical Study of 72 Cases Treated with Tartar Emetic. D. Carroll and A. V. Hommeon. -p. 366.
*Clinical Use of Penicillin in Oil and Beeswax in Pediatric Practice. F. H. Adams and Elizabeth G. Fisher. -p. 373.
Sedimentation Rate in Asthma in Children. S. Livingston. -p. 385.
*Hitherto Unrecognized Tendency to Development of Widespread Pulmonary Vascular Obstruction in Patients with Congenital Pulmonary Stenosis (Tetralogy of Fallot). A. R. Rich. -p. 389.
Dosage Schedule of Penicillin in Bacterial Infections. E. K. Marshall Jr. -p. 403.

Penicillin in Oil and Beeswax in Pediatric Practice.—Adams and Fischer treated 180 children with various acute infections with penicillin suspended in a mixture of peanut oil and beeswax. For the most part, these children were treated as ambulatory patients, necessitating daily visits to the clinic for their injections and follow-up care. Hospitalization was carried out only in cases of severe pneumonia. Once the diagnosis of pneumonia was made, nasopharyngeal and throat cultures were taken. Crystalline sodium penicillin suspended in peanut oil with 4.8 per cent bleached beeswax was used. This was supplied in 10 vials containing 300,000 units per cubic centimeter. All patients received 5,000 units per unit of weight at each injection. There were 100 cases of pneumonia, 32 of which occurred in infants under 12 months of age. The results achieved were satisfactory, with 92 good responses, 4 poor responses and 4 failures. Twenty-nine cases of suppurative otitis media, 9 of which proved to be sulfadiazine-resistant, were also treated. There was only 1 failure in this group. The penicillin blood levels obtained by this method of injection were extremely variable. Two instances of mild local inflammatory reaction at the site of injection were encountered. Both cleared spontaneously without formation of abscess. There were no allergic reactions.

Pulmonary Vascular Obstruction in Tetralogy of Fallot.—Rich shows that widespread and progressive thrombosis of pulmonary vessels of microscopic size is a frequent occurrence in patients with congenital pulmonary stenosis (tetralogy of Fallot type). This condition was present in all but 2 of 21 consecutive cases studied at necropsy. It is suggested that the predisposing factors are the increased viscosity of the blood, resulting from the compensatory polycythemia, and the reduced rate of flow in the pulmonary vessels, resulting from the greatly diminished amount of blood delivered to the pulmonary vascular system.

Diseases of Chest, Chicago

14:161-316 (March-April) 1948

Changing Concepts in Bed Rest Treatment of Tuberculosis. R. S. Anderson. -p. 167.
Tuberculous Disease of Trachea and Bronchi. A. R. Judd. -p. 180.
Tuberculosis Control in Army. E. R. Long. -p. 190.
Pulmonary Cysts. B. Gordon. -p. 193.
Early Clinical Features of Bronchogenic Carcinoma: Illustrative Cases. C. M. Norris. -p. 198.
Pulmonary Abscess Secondary to Bland Pulmonary Infarction. L. Levin, J. W. Kernohan and H. J. Moersch. -p. 218.
Pneumoperitoneum. A. Calix and S. Jacobs. -p. 233.
Progress in Tuberculosis Control in United States. F. J. Weber. -p. 243.
Experiences in Air Transportation of Patients with War Wounds of Chest. L. D. Carson. -p. 254.
Eradicating Tuberculosis in Rural Minnesota. L. S. Jordan. -p. 261.

Journal of Allergy, St. Louis

19:71-150 (March) 1948

Hypersensitivity and Immunity in Light of "Unitarian" Hypothesis. J. Bronfenbrenner. -p. 71.
Histamine Antagonists: XI. Aerosolized Antihistamine Drugs in Prevention of Histamine Bronchospasm in

Guinea Pigs. S. M. Feinberg, B. Noren and H. H. Feinberg. -p. 90.
Measurement of Changes in Vital Capacity as Means of Detecting Pulmonary Reactions to Inhaled Aerosolized Allergenic Extracts in Asthmatic Subjects. F. C. Lowell and I. N. Schiller. -p. 100.
Quantitative Studies in Skin Testing. E. L. Becker. -p. 108.
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Clinical Effects of Epinephrine by Inhalation, a Survey. R. L. Beason and F. Perlman. -p. 129.
Clinical Investigation of Beta-Morpholino-Ethyl Benzhydryl Ether Hydrochloride (Lunadryl) as Antihistamine Agent. T. H. McGavack, P. M. Schulman and L. J. Boyd. -p. 141.

Journal of Lab. and Clinical Medicine, St. Louis

33:257-396 (March) 1948. Partial Index

Dynamics of Protein Metabolism. E. P. Benditt, Eleanor M. Humphreys, H. W. Wissler and others. -p. 257.
Determination of Nitrogen Balance Index of New Lyophilized Amino Acid Preparation in Protein-Deficient Patients. W. S. Hoffman, D. D. Kozoll, P. T. Mok and others. -p. 280.
Cytochrome C.: Intravenous Administration in Man. B. Rabinovitch, K. A. C. Elliot and D. McEachern. -p. 294.
Carbamide: Plasma Concentrations, Urinary Recoveries, and Dosage. W. P. Berger, A. Kathrine Miller, Elizabeth K. Tillson and Grace A. Shaner. -p. 297.
Isolation and Identification of Influenza Viruses During Epidemic of December, 1945. Mildred W. Barnes, H. R. Morgan and M. Finland. -p. 309.
Histamine Antagonists. X. New Antihistaminic Drug, 2-[alpha-(2-Dimethylaminoethoxy)-alpha-Methyl-Benzyl]-Pyridine Succinate (Decapryn Succinate): Experimental and Clinical Results. S. M. Feinberg and T. B. Bernstein. -p. 319.
Effects of Adrenalin in Normal and Hypertensive Patients in Relation to Mechanism of Sustained Pressure Elevations. D. M. Green, A. D. Johnson, A. Lobb and G. Cusick. -p. 332.
Effect of Operation and Illness on Clot Retraction: Description of New Method. J. S. Hirschboeck. -p. 347.

Journal of Pediatrics, St. Louis

32: 227-332 (March) 1948

Respiratory Acidosis and Alkalosis in Children. S. Spector and C. F. McKhann. -p. 227.
Hematologic Studies on Children of Rh-Negative Women Compared to Those of Rh-Positive Women. Edith L. Potter and H. E. Bernstein. -p. 246.
Bacterial Flora in Eyes of Newborn Infants During First Forty Hours of Life. After Single Installation of Penicillin and Silver Nitrate. M. C. Franklin. -p. 251.
Use of Serum Gamma Globulin Antibodies to Control Chicken Pox in Convalescent Hospital for Children. W. L. Funkhouser. -p. 257.
*Does Pertussis Activate Tuberculosis? J. A. Toomey, J. C. Berno and H. Agustsson. -p. 260.
Food Allergy. IV. Function and Clinical Application of Rotary Diversified Diet. H. J. Rinkel. -p. 266.
Physical Growth of Chinese Infants. S. Gin. -p. 275.
Subluxation of Head of Radius "Nursemaid's Elbow" D. P. Boyette and A. H. London Jr. -p. 278.
Blood Chemical and Immunologic Effects of Adrenal Cortical Extract in Children. V. C. Kelley and J. H. Adams. -p. 282.
*Congenital Hemolytic Icterus, Four Generations. C. Hogeage and J. Horgan. -p. 288.
Unusual Eruptive Fever Involving Skin and Mucous Membranes: Its Relation to and Status of So-Called Stevens-Johnson Disease. P. A. Bradlow and R. A. Schless. -p. 293.
Congenital Hypertrophic Stenosis of Duodenum. E. F. Patten. -p. 301.

Does Pertussis Activate Tuberculosis?—Toomey and his co-workers reviewed all cases of pertussis admitted to the Contagious Disease Hospital of Cleveland from 1938 to 1947. There were 1,747 patients admitted with pertussis. In 38 patients there was some connection with tuberculosis, and these constituted the basis for the investigation. Twenty-three had positive reactions to the tuberculin test; 3 older children with positive reactions had negative roentgenologic observations, while 19 actually had tuberculosis. With the exception of 1 case no evidence could be found on which to base the conclusion that the tuberculosis was activated by the pertussis. It cannot be said that pertussis does not possibly activate this disease, but all evidence is to the contrary. Reactivation of tuberculosis following pertussis occurs so infrequently that it is probably a coincidence. The authors recommend, however, that every patient ill with whooping cough, especially Negro children, should have a tuberculin test at the onset of the pertussis. Every patient ill with whooping cough who coughs longer than a month should have another tuberculin test, for if he does not have bronchiectasis he may have tuberculosis. In the presence of acute whooping cough or measles, a roentgenologic diagnosis of miliary tuberculosis can never be made if the reaction to the tuberculin test is not known, for the roentgenologic features of the lungs of a patient ill with whooping cough, or measles at the height of the rash, often cannot be differentiated from those produced by miliary tuberculosis.

Congenital Hemolytic Icterus.—Hageage and Horgan present histories of 2 girls, cousins, who had familial hemolytic anemia or acholuric jaundice. Evidence that heredity plays a part in this disease was provided by the fact that the disease appeared in two first cousins (splenectomy), their aunt (splenectomy), their grandmother (icterus-anemia) and their great grandmother (icterus-anemia), all maternal, representing four generations of the same family. If this condition is diagnosed in a patient the blood of all members of his family should be examined. Blood transfusions give no sustained improvement and are palliative. Early splenectomy, followed by transfusions, promotes convalescense and sustained improvement.

Kansas Medical Society Journal, Topeka

49: 93-136 (March) 1948

Cancer of Larynx and Hypopharynx. G. M. Tice and C. H. White. -p. 93.
*Treatment of Leukemia and Allied Disorders with Urethane (Ethyl Carbamate). S. J. Wilson, G. W. Wise Jr. and J. W. Campbell. -p. 97.
Epidermoid Carcinoma of Hand. P. J. Clark and T. M. Johnson. -p. 100.
*Neurogenic Bladder of Poliomyelitis. W.L. Valk. -p. 102.

Urethane in Leukemia.—Wilson and his associates report on the preliminary results of urethane therapy in 27 patients with leukemia or allied conditions. The best results were obtained in 7 patients with chronic myelogenous leukemia. On the whole, urethane produces about the same clinical hematologic results as standard roentgen therapy. The therapeutic response of chronic lymphatic leukemia is less satisfactory and more variable than that observed in chronic myelogenous leukemia. The clinical course of the acute leukemias is not affected by urethane. Polycythemia vera responds only partially to the drug. One case of reticuloendotheliosis and 1 of multiple myeloma were treated, and the clinical course of the disease was not affected in either instance. Nausea and anorexia are frequent when the drug is given orally. Other toxic effects have been noticed. Further investigations are necessary to establish the proper procedure, dosage, toxic levels and modes of action of urethane.

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Neurogenic Bladder of Poliomyelitis.—Involvement of the urinary bladder and colon occurs in 10 to 20 per cent of the cases of acute poliomyelitis. Temporary paralysis of the bladder occurred in 8 per cent of the cases of poliomyelitis seen at the University of Kansas Medical Center during the 1946 epidemic. Cystometric studies on patients with poliomyelitis convinced the author that this type of neurogenic bladder is produced by poliomyelitis. His is the first description of cystometric aspects of the neurogenic bladder of poliomyelitis. He suggests that the term motor neurogenic bladder of poliomyelitis be applied to this condition. Generally the bladder dysfunction, like the atony of the colon, is of short duration and can be relieved by intermittent catheterization or use of an indwelling catheter for a few days. The author, however, observed a case of permanent paralysis of the bladder in a boy aged 16. Cystometric examination on numerous occasions revealed an atonic neurogenic bladder. In spite of many attempts at voiding, this patient was never able to elicit a voiding contracture. Resection of the internal sphincter likewise was futile. One year after the onset of the disease he was still on catheter drainage and had shown no appreciable improvement in the extensive paralysis of his lower extremities. There was complete motor paralysis of both legs, thighs and hips without sensory loss. Vesical calculi were crushed transurethrally on three occasions.

Michigan State Medical Society Journal, Lansing

47: 123-232 (Feb.) 1948 Partial Index

Early Diagnosis of Pancreatic and Ampullary Growths Evaluation of Their Surgical Treatment. A. O. Whipple. -p. 169.
Carcinoma of Rectum and Lower Part of Sigmoid Flexure: Present-Day Management. C. F. Dixon. -p. 172.
Rocky Mountain Spotted Fever Appears in Michigan G. N. Rein. -p. 182.

47:233-360 (March) 1948

Michigan's Rheumatic Fever Program. P. C. Angove. -p. 291.
Early and Late Ectopic Pregnancy. F. E. Whitacre and H. D. Lynn. p. 295.
Changing Trends in Cesarean Section. Analysis of Cesarean Sections Performed in Detroit in 1925, 1930 and 1945. H. C. Mack and R. S. Siddall. -p. 286.
Comparative Morbidity in Cesarean Section. V. J. Turcotte and H. F. Jarvis. -p. 294.
Doctor in Court. F. R. Allaben. -p. 296.

New Orleans Medical and Surgical Journal

100: 397-444 (March) 1948

Diagnosis and Treatment of Acute Malignant Obstruction of Large Bowel. N. L. Michel. -p. 397.
Epidemiology and Recent Developments in Poliomyelitis. J. G. Molner. -p. 408.
Dicoumarin-Medical Aspects. T. Findley. -p. 413.
Review of Certain Aspects of Pathologic Physiology of Heart Disease. R. C. Webb. p. 418.
The Wolff-Parkinson-White Syndrome (Bundle of Kent Syndrome; False Bundle Branch Block). A. Silverman. -p. 428.

New York State Journal of Medicine, New York

48:339-448 (Feb. 15) 1948

Transplantation of Extensor Carpi Ulnaris to Give Abduction of Thumb. M. Burman. -p. 383.
Neuro-Allergy in Childhood. T. B. Clarke. -p. 393.
Diagnostic Experience with Hepatic Specimens Obtained by Needle Puncture. S. Sones, W. H. C. Chapple, Victoria A. Onorato and Eileen Marchant. -p. 398.
Carcinoma of Ovary Arising in Endometrial Cyst. L. D. Moss and A. L. Rumola. -p. 401.
Differential Diagnosis of Congenital Heart Disease. M. H. Melinor. -p. 407.
Microbiologic Aspects of Salmonellosis in Children. E. Neter. -p. 412.
Neurologic Procedures in Pediatric Practice. B. Crothers. -p. 416.
Routine Examination of Cerebrospinal Fluid. A. H. Harris and C. Lange. -p. 418.

48: 449-560 (March 1) 1948

County Health Departments. E. S. Godfrey Jr. -p. 491.
Wilms' Tumors. H. R. Sauer. -p. 497.
Endemic Features of Rickettsialpox. M. Greenberg. -p. 502.
County Tuberculosis Hospitals. R. E. Plunkett. -p. 507.
Tumor Clinics in New York State. L. C. Kress. -p. 511.
Penicillin in Gonorrhea: Experiences with Various Preparations and Technics. A. Jacoby, A. Ollisoang, J. Freund and T. Rosenthal. -p. 517.
Chronic Benign Pneumonitis: Its Discovery in Older Individuals with Diminished or Absent Gag Reflex. L. Schneider. -p. 520.
Role of Choline Chloride in Treatment of Certain Cases of Diabetes Mellitus: Studies of Liver Dysfunction. L. Pelner B. Davidson, S. Waldman and R. Margolis. p 523.

Wilms' Tumors.—Sauer believes that with a few exceptions kidney tumors of children, described as sarcomas or carcinomas, belong to the Wilms type of malignant new growth. The complexity of the histologic picture accounts for the confusing terminology which includes terms like adenosarcoma, embryonal sarcoma, teratoma, myochondrosarcoma and rhabdosarcoma, or myxosarcoma. Although Wilms' tumors comprise approximately 20 per cent of all malignant neoplasms in children, only 16 children with this type of tumor were admitted to the Roswell Park Memorial Institute during a thirty year period. This represents an incidence of only 1 case in about 3,500 admissions. Pathogenesis, clinical course, symptoms and diagnosis of the disease are discussed. The prognosis is poor, with an ultimate mortality rate of close to 90 per cent. The duration of life averages less than one year after the diagnosis is made. Removal or complete destruction of the tumor before development of metastases is imperative. Prompt surgical treatment followed by postoperative irradiation is advocated in small, movable tumors. Preoperative irradiation is advisable in fairly large or apparently inoperable lesions, in an attempt to attain sufficient shrinkage to make the tumor operable. Removal of the tumor in such cases should be followed by supplementary postoperative irradiation. Inoperable tumors should be treated by radiation alone. Favorable results and even cures may be accomplished by irradiation in certain radiosensitive tumors of this type. The author reports the case of a white girl, aged 2 years, in whom an inoperable Wilms' tumor was cured following irradiation therapy exclusively. The last series of roentgenologic treatments terminated in October 1939, and the girl has been in good health since that time.

Pennsylvania Medical Journal, Harrisburgh

51: 593-704 (March) 1948

Studies on Renal Function in Childhood. M. I. Rubin. -p. 617.
Fundamentals of Psychiatry for General Practitioner. J. H. Wall. -p. 622.
Carcinoma of Cervix Treated by Combined Radiation and Surgery. J. R. Babcock. -p. 626.
Patch Test: Its Use and Abuse. R. Friedman. -p. 629.
Present Status of Treatment of Thrombosis and Embolism in Surgical Patients. C. K. Kirby and J. E. Rhoads. -p. 638.
Further Neonatal Salvage. Elizabeth K. Rose, Jean Gowing, Harriet L. Hartley and Amy D. Swift. -p. 645.
Nephrosis--Survey. W. W. Briant Jr., H. R. MacDonald and I. A. Solow. -p. 649.

Proc. Soc. Exper. Biol. & Med., Utica, N. Y.
67: 1-124 (Jan.) 1948. Partial Index

*Cultivation of Toxoplasma in Developing Chick Embryo. J. O. MacFarlane and I. Ruchman. -p. 1.
Microbiologic Determination of Apparent Free Methionine in Blood of Children. H. K. Silver. -p. 31.
*Effect of Muscular Fatigue on Histamine-Provoked Ulcer with Observations on Gastric Secretion. C. H. Lillehei and O. H. Wangensteen. -p. 40.
Activation of Hypertensin and Tyramine by Subthreshold Amounts of Epinephrine. E. Nylen and J. H. Heller. -p. 62.
*Cultivation of Toxoplasma in Embryonated Egg: Antigen Derived from Chorioallantoic Membrane. J. Warren and Sadie B. Russ. -p. 85.

Cultivation of Toxoplasma in Chick Embryo.—McFarlane and Ruchman used the R.H. strain of toxoplasma, which had been isolated by Sabin from a fatal human case of encephalitis. It had been maintained by continuous intracerebral passages in mice. Material from passages 304 to 344 was used for initiating the cultures in embryonated eggs. Injection of toxoplasma-infected mouse brain suspensions into the yolk sac of embryonated eggs on at least six different occasions led to multiplication of the parasites with resulting death of the embryo in four to ten days after inoculation. Smears of the chorioallantoic membrane and the yolk sac stained with Wright's stain revealed numerous toxoplasma both free and intracellular.

Muscular Fatigue and Histamine-Provoked Ulcer.—Lillehei and Wangensteen say that complete physical rest is frequently mentioned by internists as a valuable adjunct in the medical management of peptic ulceration. This precept has been derived primarily from clinical observation. The authors report observations on the effect of moderately severe muscular fatigue on the incidence of the histamine-provoked ulcer and on gastric secretion in dogs. The animals were run from three to four hours consecutively each day on five to six successive days on an electrically driven endless belt treadmill. The dogs were allowed a ten minute rest period each hour and as much water as they wanted. The results indicated that moderately severe muscular fatigue abets the histamine-provoked ulcer quite appreciably, while at the same time depressing the output of hydrochloric acid. These seemingly paradoxical observations would suggest that the ulcer-abetting effect of muscular fatigue is an effect on the mucosa itself (most probably on its blood supply) which renders it more vulnerable to the digestive action of the acid-pepsin mixture.

Antigen Derived from cultivation of Toxoplasma in Egg.—Warren and Russ found that inoculation of embryonated eggs with toxoplasma resulted in a generalized parasitic disease of this host with a fatal termination. The agent could be maintained by serial passage of embryo brain. Chorioallantoic membranes from infected eggs contained a stable, specific soluble antigen which fixed complement with toxoplasma-immune animal serum. Human serums from cases of toxoplasmosis which were known to contain neutralizing antibody against the parasite also fixed complement with chorioallantoic membrane antigen.

Psychosomatic Medicine, Baltimore
10: 1-68 (Jan.-Feb.) 1948

Psychodynamics in Parkinsonism. G. Booth. -p. 1.
Instincts and Homeostasis. L. S. Kubie. -p. 15.
"Experimental Neurosis" Resulting from Semistarvation in Man. B. C. Schiele and J. Brosek. -p. 31.

Puerto Rico J. Pub. Health & Trop. Med., San Juan
23: 185-308 (Dec.) 1947

Balantidial Dysentery: Report of 4 Cases with Postmortem Study. E. Koppisch and Virginia N. Wilking. -p. 185.
*Splenectomy in Schistosomiasis: Preliminary Report. J. Noya Benitez. -p. 247.
Cutaneous Arachnoidism Experimentally Produced with Glandular Poison of Loxosceles Laeta. A. Macchiavello. -p. 266.

Splenectomy in Schistosomiasis.—Noya Benitez has performed splenectomies on 20 patients who were in the preascitic stage of Banti's syndrome due to schistosomiasis. All patients manifested improvement in general health and well-being, their blood counts, hemoglobin level and platelet counts having gone up to nearly normal limits and their liver function tests showing considerable improvement. Three patients had postoperative hematemesis, but all recovered under conservative treatment. There were no deaths in this series. The results obtained in this series and observations made in other clinics show that splenectomy is indicated and is the treatment of choice in cases of Banti's syndrome due to schistosomiasis.

Quarterly J. of Studies on Alcohol, New Haven, Conn.
8: 553-694 (March) 1948

Failure of Pyruvate and Arsenate to Alter Alcohol Metabolism. H. B. Hulpieu, Verna V. Cole and D. Smolenski. -p. 553.
Constructive Teamwork in Treatment of Alcoholism. J. Thimann. -p. 569.
Abstract Archive of Alchol Literature. E. M. Jellinek, Vera Efron and M. Keller. -p. 580.
Instruction on Alcohol Problems in Public Schools. R. G. McCarthy and E. M. Douglass. -p. 609.
Survey of Local Church Activities and Pastoral Opinions Relating to Problems of Alcohol. B. Y. Landis. -p. 636.

Review of Gastroenterology, New York
15: 181-260 (March) 1948

Early Diagnosis of Carcinoma of Colon and Rectum. L. C. Sanders. -p. 193.
Surgery of Peptic Ulcer in Prison. V. G. Burden. -p. 208.
Gastroenterologic Comparison of White and Colored Soldiers. A. A. Kirchner. -p. 218.
Observations on Treatment of Chronic Hypertrophic Gastritis with Shortwave Diathermy. E. D. Palmer. -p. 233.
Constipation. H. A. Monat. -p. 242.

South Carolina Medical Assn. Journal, Florence
44: 37-72 (Feb.) 1948

Phlebothrombosis Occurring in Absence of Trauma or Bed Rest. G. T. McCutchen and W. C. Cantey. -p. 37.
Lame Back With or Without Sciatica. A. T. Moore and W. C. Cook. -p. 41.
*Rabies. J. C. Moore. -p. 43.

44: 73-112 (March) 1948

Tetanus: Incidence and Treatment. H. C. Robertson Jr. -p. 73.
Human Pyramidal Tract. A. M. Lassek. -p. 78.

Rabies.—In dogs as in human beings there occur two types of symptoms, the furious and the dumb. The incubation period varies between four weeks and ten months. It is generally accepted that paralytic rabies is more likely to develop after a minor and insignificant bite. In untreated patients with severe bites typical furious symptoms usually develop. Paralytic rabies runs its course

in between seven and one half and twelve days, while in furious types the average course is three days. The treatment of rabies comprises two phases, local therapy and prophylactic immunization. Local treatment consists of cleaning the wound and cauterizing it. In the prophylactic treatment against rabies, known as the Pasteur treatment, vaccines are used which consist of emulsions of rabbit brain or spinal cord containing either living or killed fixed virus. The Semple method of phenol-killed vaccine is most commonly employed. This vaccine consists of a four per cent emulsion of nervous tissue in physiologic saline containing phenol in 0.5 per cent concentration. The methods of administration will vary somewhat, but with the Semple vaccine it is recommended that 2 cc. be given subcutaneously daily for a total of eighteen to twenty-five injections. Patients bitten on the extremity or trunk receive eighteen injections, while those bitten on the head, face or neck receive up to twenty-five injections. Pasteur's treatment is indicated in any person who has been bitten or scratched by a rabid animal or in whom the saliva of such an animal has reached an open wound. Any one bitten or scratched by a stray dog in which the presence of rabies cannot be excluded should also be treated. After commenting on the use of ultraviolet irradiation in the production of potent inactivated vaccine, the author stresses that, since dogs represent the main disseminating factor of rabies virus, interruption of the cycle involves the control of the disease in dogs. It is impossible to depend alone on vaccination of dogs. Hobel, who found wide variability in the protective action of commercial vaccines, developed the Hobel test of potency of vaccines, which has been generally adopted as a prerequisite before offering any commercial vaccine for sale in the United States. Since stray, homeless dogs do not receive vaccination, they should be destroyed. Sentimental and ignorant pet owners have created some public opinion against the fulfilment of strict control of pets, but they should not be permitted to jeopardize the health of others.

Tantalum Mesh in Repair of Ventral Hernias.—According to Koontz, the repair of large ventral hernias has always taxed the ingenuity of the surgeon. This is true not only when the defect is large but when the fascial structures surrounding a smaller defect are weak. Most of these defects occur in extremely obese persons. The fascia surrounding the defect is often weakened by the infiltration of fat, and this militates against a successful repair by any of the ordinary methods. In experiments on dogs 3 to 6 inches (7.6 to 15 cm.) of the rectus muscle on each side was resected, and the defect immediately repaired by suturing a piece of tantalum gauze to the edges of the fascia surrounding the defect. These animals were killed from four and one-half to nine and one-half months after operation. In each instance the defect was completely closed by the mesh, which had become covered by a thick and tough envelope of fibrous tissue. The fibrous tissue had grown through the meshes of the gauze everywhere and could not be separated from the gauze except by sharp dissection. Subsequently the author used the tantalum mesh in 5 obese patients with exceedingly large hernias. The results have made the author enthusiastic about this material. He mentions other surgeons who have used it and concludes that tantalum mesh will prove a most valuable material in the repair of large and difficult ventral hernias.

New Trivalent Antimony Compound in Granuloma Inguinale.—The new trivalent antimony compound which Allison used in the treatment of 65 Negro patients (32 women and 33 men) with granuloma inguinale is lithium stibiothiomalate. The drug was administered by intramuscular injections in dosages of 3 cc., equivalent to 30 mg. of antimony, twice weekly. Injections in the buttock were painless and gave no more local tissue reaction than that from "fuadin." The largest number of injections administered was forty-two; the smallest was five. The majority of patients received approximately twenty injections. Reactions do occur. Once a patient becomes intolerant of one trivalent antimony compound, he usually becomes intolerant of other forms. A few patients tolerate one antimony compound better than another. Adequate food, vitamins and iron intake, a daily cleansing bath and bowel evacuation are as necessary as drug therapy.

Southern Medical Journal, Birmingham, Ala.
41: 187-284 (March) 1948

Foreign Bodies in Duodenum. M. Equen. -p. 187.
Cataract Surgery: Recent Advances. E. G. Gill. -p. 191.
Report of 425 Fenestration Operations for Clinical Oto-Sclerosis. J. M. Smith. -p. 199.
Bone Reconstruction in Surgery of Head. G. G. Gill. -p. 209.
Repair of Ventral Hernias with Tantalum Mesh: Preliminary Report. A. R. Koontz. -p. 214.
Anaplastic Cervical Epithelium: Relationship to Cervical Carcinoma. C. T. Ashworth and A. W. Diddle. -p. 217.
Impressions of Vaginal Smear Technic in Diagnosis of Cervical Cancer. L. C. Posey and J. A. Cunningham. -p. 221.
Maternal Mortality in South: Analysis of 175 Deaths. F. R. Lock. -p. 229.
Cancer Program of United States Public Health Service. L. A. Scheele. p. 237.
Brief Stimulus Therapy. R. F. Gayle Jr. and D. Josephs. -p. 245.
Use of Furmethide (Furfuryltrimethylammonium Iodide) for Paralysis of Bladder from Poliomyelitis. R. B. Lawson. -p. 251.
Proper Role of Subtotal Gastrectomy in Treatment of Chronic Gastric and Duodenal Ulcer. L. Grove and E. Rasmussen. -p. 255.
Differential Diagnosis of Jaundice by Laboratory Methods. O. B. Hunter Jr. -p. 252.
Recent Advances, Etiology and Therapy of Cirrhosis of Liver. H. B. Mulholland and T. S. Edwards. -p. 269.
*Effects of New Trivalent Antimony Compound upon Granuloma Inguinale. G. G. Allison. -p. 276.

Southern Surgeon, Atlanta
14: 170-224 (March) 1948

*Testosterone in Far Advanced Breast Cancer: Preliminary Report. T. C. Davison and A. H. Letton. -p. 170.
Surgical Treatment of Essential Hypertension. H. Wilson. -p. 185.
Multiple Pelvic Malignancies. B. H. Hill and B. R. Glenn. -p. 192.
Sterility. R. M. Brannon. -p. 195.
Gunshot Wounds of Abdomen. K. D. Grace. -p. 202.
Control of Trigeminal Neuralgia Pain (Bee Venom). H. Bayne. -p. 209.
Open Reduction and Fixation of Fractures of Facial Bones. J. T. Ellis and S. B. Windham. -p. 211.

Testosterone in Advanced Stage of Cancer of the Breast.—Davison and Letton administered androgen in the form of "oreton" to women with cancer of the breast. They began with 50 mg. per day, reducing this dose later to 50 mg. three times per week. They have watched the blood chemistry of the patients, the estrogen level as judged by vaginal smears and the change in the metastases by roentgenograms as well as by biopsies. Seven of 8 pa-

tients obtained some degree of relief of pain and gained some weight on this therapy. Four of these 8 "hopeless" patients have returned to their regular occupations after taking large doses of testosterone. One patient with soft tissue metastases only had excellent results persisting for over fifteen months. Apparently the treatment is of temporary value only. If omitted there is a return of activity of the cancer. Biopsy shows that the cancer is being "choked" by a proliferation of fibrous tissue and that the cells, although still viable, are pyknotic and of reduced activity. Good results are found in patients with depression of estrogenic activity, poorer results in patients who still show estrogenic activity after receiving testosterone. Masculinizing effects were noted, but the patients did not object when they realized the other beneficial results. The authors believe that any patient with metastatic carcinoma of the breast not only should have the usually accepted treatment of surgery and radiation but should be given the benefit of a trial on large doses of testosterone with careful follow-up.

Surgery, St. Louis

23:321-602 (March) 1948. Partial Index

George J. Heuer's Contributions and His Place in American Surgery. W. D. Andrus. -p. 321.
Experiences with Anastomosis of Common Bile Duct to Duodenum, and Repair of Strictures of Common Bile Duct. M. M. Zinninger. -p. 337.
Lymphosarcoma of Gastrointestinal Tract. D. H. Poer. -p. 354.
Amniotic Hernia. H. G. Hollenberg. -p. 363.
Importance of Accurate Pathologic Classification in Prognosis of Nasal Tumors. N. C. Foot and G. A. Humphreys. -p. 359.
Surgical Treatment of Acute Cholecystitis. F. Glenn. -p. 397.
*Further Observations on Treatment of Bleeding Peptic Ulcer. C. W. Holman. -p. 405.
*Role of Glossopharyngeal Nerve in Carotid Sinus Reflex in Man; Relief of Carotid Sinus Syndrome by Intracranial Section of Glossopharyngeal Nerve. B. S. Ray and H. J. Stewart. -p. 411.
End Results in Treatment of Peptic Ulcer by Posterior Gastroenterostomy. W. A. Cooper. -p. 425.
Late Results Following Perforated Peptic Ulcer. S. W. Moore and R. Hendricks. -p. 442.
Neurogenic Tumors of Stomach. J. P. West and G. Knox. -p. 450.
Primary Tumors of Jejunum and Ileum. J. H. Eckel. -p. 467.
Penetrating Wound of Chest with Division of Bronchial Artery: Report of Case. C. M. Brane. -p. 476.
Resection of Rectum with Preservation of Anal Sphincter. W. F. Nichol Jr. and A. J. Chenoweth. -p. 480.
*Radical One-Stage Pancreaticoduodenectomy. C. G. Child III. -p. 492.
Twenty-Seven Years of Prostatic Surgery at Bellevue Hospital. Study of Comparative Mortality Rates. J. W. Draper. -p. 515.

Treatment of Bleeding Peptic Ulcer.—Holman cites the case of a patient who died five days after the onset of bleeding from a peptic ulcer. The sequence of events in this patient is typical of several that were witnessed each year under a conservative therapeutic regimen. A survey was made, which led to the abandonment of conservative treatment in favor of immediate operation for certain groups of patients. The author compares the results under this more radical therapy with the results under the earlier conservative therapy. During the earlier period, patients admitted because of severe hemorrhage from ulcer were treated with complete rest in bed, nothing by mouth, adequate sedation and supportive parenteral fluids until the bleeding had stopped. Those who continued to bleed under this treatment also received repeated blood transfusions. Twenty-one, or 13 per cent, of these patients died. The problem was to recognize those patients who would not benefit from conservative treatment. Critical analysis revealed a poor prognosis for two groups: those who failed to improve within forty-eight hours after they had been placed on a strict medical regimen and those who suffered the first hemorrhage while they were under a medical regimen. Age seemed important. In patients under 30 years of age the mortality was 6 per cent, in contrast to 20 per cent in those 50 years and older. In view of these observations it was decided that any patient who fell into either of the two groups described, particularly if he were over 40 years of age, would be operated on immediately if the condition warranted the risk. A survey of the period from 1940 to 1946 during which the newly instituted treatment regimen was followed showed a fall in the mortality from the previous 13 per cent to 5 per cent. Gastric resection is tolerated surprisingly well if a large amount of blood is given before, during and after the operative intervention. Resection is the ideal procedure to insure both immediate control of bleeding and a satisfactory permanent result. Indirect methods such as gastroenterostomy and plastic procedures on the duodenum have little value. Gastric resection offers the best protection against future hemorrhage.

Glossopharyngeal Nerve in Carotid Sinus Reflex.—Ray and Stewart cite evidence pointing to the important role of the glossopharyngeal nerve in the carotid sinus reflex in man, but they show that with insufficient evidence to conclude that this nerve alone comprised the principal afferent pathway in the case of the hypersensitive carotid sinus syndrome, the crucial experiment called for intracranial division of the nerve in a patient with the syndrome. In 1942 Herbert and associates reported their experience with division of the glossopharyngeal nerve in a man aged 64 with a hypersensitive carotid sinus. The carotid sinus reflex previously induced by pressure over the sinus was abolished on the side of the nerve section. The authors report 3 cases in which the glossopharyngeal nerve was divided intracranially on one side for relief of carotid sinus syndrome. They conclude that: (1) the glossopharyngeal nerve transmits the afferent impulses of the carotid sinus reflex induced by pressure on the carotid sinus; (2) intracranial division of the glossopharyngeal nerve permanently abolishes the effects of pressure on the homolateral carotid sinus; (3) the chemically induced part of the carotid sinus reflex probably remains intact after intracranial division of the glossopharyngeal nerve; (4) as an alternative procedure to local denervation of the carotid sinus for relief of the carotid sinus syndrome, intracranial glossopharyngeal nerve section has an advantage in that the former procedure may be followed by regeneration of the nerves and possesses the hazard of damage to the carotid artery, and (5) intracranial division of the glossopharyngeal nerve can be employed in patients in whom the condition of the local tissues about the carotid sinus might make local surgery undesirable or impossible.

Radical One Stage Pancreaticoduodenectomy.—Child says that during the twelve years which have elapsed since Allen O. Whipple and his associates announced their initial success in extirpating the duodenum and the head of the pancreas, the original two stage operation has undergone many modifications. In November 1943 Child reported a one stage procedure which was justly criticized by Whipple not only because drainage of the biliary tract was reestablished by means of the gallbladder but because this anastomosis was placed distal to that

between the stomach and the jejunum. The operation was promptly changed to one in which biliary drainage was obtained by way of a choledochojejunostomy placed proximal to the gastroenterostomy. This operation was performed in 22 patients. In this one stage procedure it was found helpful to have clearly in mind a series of steps which, if followed in orderly progression, contribute materially to shortening and facilitating a procedure which is always long and arduous. The initial features of this operation are the maneuvers directed toward determining, if possible, whether or not the superior mesenteric vein is compromised by the tumor. It can be hoped that eventually some successful method of avoiding the necessity of preserving this structure may be devised, for it is certainly the weakest point as well as the most frustrating in the entire operative attack on pancreatic cancers. Indication that it may be sacrificed is to be found in a case reported by Brunschwig and in a patient in this series in whom postmortem examination five days following division of the superior mesenteric vein failed to reveal any significant venous engorgement of the small bowel.

Texas State Journal of Medicine, Fort Worth

43: 609-670 (Feb.) 1948

Relationship of pathologist to Tumor Clinic Program. C. Phillips. -p. 617.
Examination of Body Fluids for Diagnosis of Malignancy. P. M. Marcuse and W. B. Coulter Sr. -p. 623.
Primary Carcinoma of Lung: Report of 48 Cases. D. W. Quick Jr. and P. Brindley. -p. 627.
Melanoma: Experience with a Series Over a Period of Years. M. Winsett. -p. 631.
Improvement of Advanced Carcinoma of Breast Following Oral Administration of Estrogenic Hormone. W. L. Mann and J. P. Martin. -p. 636.
Problem of Early Diagnosis of Cancer of Stomach. A. W. Hartman. -p. 637.
Factors Influencing Operability of 337 Carcinomas of Colon and Rectum. J. W. Hendrick and T. R. Adams. -p. 641.

United States Naval Med. Bulletin, Washington, D. C.

48:153-352 (March-April) 1948. Partial Index

*Intramedullary Fixation of Fractures of Femur. H. E. Wiggins and G. B. Lewis.—p. 161.
Specific Therapy in Osteomyelitis. J. W. Metcalfe.—p. 175.
Hodgkin's Disease. J. R. Connelly, J. T. Smith and J. M. Straughan. —p. 180.
Review of Present Methods in Early Diagnosis of Bronchogenic Carcinoma. H. E. Reitz.—p. 198.
Aphorisms on Peptic Ulcer Seen in Naval Service. L. Gunther.—p. 207.
Use of Plasma in Treatment of Combat Fatigue. P. Solomon.—p. 226.
Interesting Notes on Bipartite Patellae. J. J. Callahan.—p. 229.
Study of Effect of Breathing Oxygen or Normal Air After Exposure to Atmosphere Having High Concentration of Carbon Dioxide. R. Hayter and G. J. Duffner.—p. 234.
Dysentery Outbreak Aboard Cruiser in Apra Harbor, Guam, Marianas Islands. R. A. Mount and T. M. Floyd.—p. 240.
Treatment of Acute Sacrococcygeal Cyst Teratoma. J. F. Adams. —p. 250.
Hemorrhage Associated with Gastritis: Review of Literature and Report of 2 Cases. I. L. Chipman Jr.—p. 253.

Intramedullary Fixation in Fractures of Femur.—Wiggins and Lewis found internal fixation of fracture by means of the intramedullary nail after the method of Kuntscher useful in the treatment of certain fractures of the femur; they report 6 cases of fractures of the femur treated by intramedullary fixation. Internal fixation by means of the intramedullary nail may be substituted for other methods of fixation when open reduction is necessary. Intramedullary fixation is indicated in femoral fractures when closed reduction has failed, or in those which for other reasons must be openly reduced. The method has been useful in handling several femoral fracture problems; e. g., acute fractures of the upper third of the shaft, old unreduced fractures, old nonunions and shaft fractures in paraplegic persons. The advantage over other methods of internal fixation are; a technically easier operative procedure; a shortened operative time; a lowered operative and postoperative morbidity; obviation of plaster immobilization, and a shortened healing time with earlier ambulation. Two serious complications have been seen, refracture and bending of the nail. The refracture occurred in the paraplegic patient when it became necessary to extract the nail after three months. The nail should not be removed before trabeculation is established. In spite of postoperative immobilization there was decided bending of the nail at the fracture site in 1 case. It appears that the rolled sheet stainless steel nail available to the authors is not strong enough to provide satisfactory fixation in all persons. The European literature describes the use of a much heavier nail. With the type of nail used in this series light skeletal balanced traction, with exercise of the joints, should be maintained until the patient is ready for a brace. An ischial weight-bearing caliper should be worn until solid union is present. Eventual extraction of the nail would seem desirable, but the literature does not indicate that it is requisite.

Virginia Medical Monthly, Richmond

75: 107-158 (March) 1948

Virginia Hospital Survey and Construction Program Under Hill-Burton Act. L. J. Roper. -p. 108.
Selection of Cases and Surgical Treatment of Hypertension. C. C. Coleman, J. M. Meredith and C. E. Troland. -p. 110.
Traumatic Appendicitis. S. H. Macht. -p. 122.
Roentgen Manifestations of Intra-Abdominal Abscess. S. Richman. -p. 124.
*Treatment of Laryngeal Tuberculosis with Streptomycin. F. H. McGovern and L. R. Broome. -p. 129.
Treatment of Rheumatoid Arthritis. M. M. Pinckney. -p. 131.
Treatment of Migraine. J. W. Thomas. -p. 134.
Cirrhosis of Liver--Some Comments upon Clinical Diagnosis and Medical Management. L. L. Thompson Jr. -p. 137.

Streptomycin in Laryngeal Tuberculosis.—In the first of the 2 patients treated by McGovern and Broome, examination of the larynx showed a large ulcerated lesion involving the right arytenoid and right ventricular band. Roentgen examination of the chest showed tuberculous infiltration in the upper part of the left lung. Under local sulfonamide therapy the ulceration increased in size and depth. The patient was given 1 Gm. of streptomycin divided in six doses intramuscularly each twenty-four hours for one week, and then 1.5 Gm. daily for nine weeks. The streptomycin was also administered as a laryngeal spray every four hours. At the end of two weeks the ulceration showed improvement and the pain was relieved, and at the end of one month the ulcer had completely healed. Roentgen examination of the chest showed improvement in the left lung. There were no toxic vestibular or other effects of the drug. Examination of the throat of the second patient before the initiation of streptomycin therapy revealed an enormous pale, infiltrated, ulcerated, turban-shaped epiglottis; the interior of the larynx could not be seen. Streptomycin therapy was started as in the first patient. The throat has improved steadily but is not yet normal. Inasmuch as the laryngeal lesion in the first case had become progressively larger up to the time of treatment with streptomycin and then healed so promptly, the authors had little doubt that the streptomycin was the causative factor. The striking symptomatic improvement in the second case illustrates the value of this form of treatment in obstinate cases of tuberculosis.

West Virginia Medical Journal, Charleston

44: 25-48 (Feb.) 1948

New Horizons for Old Age. T. G. Klumpp. -p. 25.
School Health. N. H. Dyer. -p. 30.
Trypars amide Optic Atrophy. A. C. Espusito. -p. 35.
Ocular Affections of Newborn. F. D. Costenbader. -p. 36.

44:49-74 (March) 1...

Diagnosis and Treatment of Ectopic Pregnancy. H. H. Ware Jr. -p. 49.
Cerebral Palsy Clinic. Marguerite E. MacGregor. -p. 53.
Fracture of Greater Multangular Bone: Report of 2 Cases. R. L. Anderson and T. Kats. -p. 55.
Need for Well-Child Conferences and Prenatal Clinics in West Virginia. Hallie I. Morgan. -p. 58.

Western J. Surg., Obst. & Gynecology, Portland, Ore.

56: 127-192 (March) 1948

Prolapse of Vaginal Vault Following Hysterectomy: New Method of Repair. H. N. Shaw. -p. 127.
*Papillary Adenocarcinoma of Thyroid Gland, So-Called Lateral Aberrant Thyroid Tumors. B. M. Black, -p. 134.
*Therapeutic Value of Repetitive Lipiodal Tubal Insufflations. R. N. Rutherford. -p. 145.
Semen Evaluation and Fertility. E. F. Hoffman. -p. 155.
Cystic Disease of Lungs. W. L. Rogers. -p. 157.
Resection of Mandible. D. B. Seabrook. -p. 166.
Pregnancy in Diabetic. L. J. Palser, J. M. Crompton and R. H. Barnes. -p. 175.

Lateral Aberrant Thyroid Tumors.—Black points out that it is widely believed that the tumors of obvious thyroid origin which are occasionally seen in the lateral cervical regions arise from the lateral thyroid anlagen and, hence, are properly called lateral aberrant thyroid tumors. The early view that these tumors were benign has been modified, and the concept that the lateral cervical tumors are metastatic is of more than theoretic importance. Review of 112 cases of papillary adenocarcinoma of the thyroid gland treated at the Mayo Clinic from 1939 to 1945, inclusive, revealed that the lateral cervical papillary tumors are metastatic lesions from a primary papillary adenocarcinoma of the thyroid gland. The malignant nature of the primary lesion in the thyroid is well illustrated by the number of local recurrences that follow subtotal lobectomy. If the papillary adenocarcinoma is larger than a few millimeters in diameter, and if it is recognized during the operation, a total rather than a subtotal lobectomy should be performed. Although subsequent operations to remove involved cervical lymph nodes were not infrequently necessary, the author believes that the removal of only the involved lymph nodes, generally as a group, is sufficiently radical treatment of the metastatic lesions. Examination at stated intervals after the operation to determine whether unremoved lymph nodes have become palpable is necessary. In addition to the fact that a primary papillary adenocarcinoma was found in every case in the series, the fact that the primary lesion was always present in the corresponding lobe of the thyroid gland is of importance from the point of view of treatment.

Repetitive "Lipiodal" Tubal Insufflations.—Rutherford reports on 417 patients who were studied over a period of five years. They presented themselves with either primary or secondary sterility and were unselected other than by their wish to have a child. They were 19 to 41 years of age. The women were proved to be habitually ovulating; they had no physical defects detectable by the usual methods, and their only cause of infertility was tubal occlusion diagnosed on two failures of air insufflation. The woman was taught to calculate her fertile period. Rubin's test was done between the eighteenth to sixteenth day before the first day of the next calculated period. If air failed to pass at a pressure of 200 mm. of mercury, a repeat Rubin test was done five to seven days later. If, on the second air insufflation, no fall in pressure was obtained, the patient was scheduled for oil insufflation during the following fertile period. Iodized poppyseed oil 40 per cent was introduced by means of a Luer-Loc syringe and two roentgenograms were taken. The uterotubograms were done once monthly until tubal patency was established, or until three consecutive efforts failed to demonstrate continued progress in opening the tubes. Patency was achieved in 71 per cent of the women, and pregnancy resulted in 63 per cent. The dangers of the procedure are outlined, as well as the need for proper selection of cases and for the timing of the procedure.

Wisconsin Medical Journal, Madison

47:181-268 (Feb.) 1948

Trends in Infant Feeding. M. J. E. Senn. -p. 195.
Notes on Treatment of Chronic Hepatic Disease. A. M. Snell. -p. 199.
Management of Allergic Child. H. J. Lee. -p. 204.
Fracture Disabilities. M. L. Jones. -p. 207.
Present Status of Pulmonary Resection for Carcinoma and Inflammatory Diseases of Lung. J. W. Gale and A. R. Curreri. -p. 210.

47:269-360 (March) 1948

Management of Late Hemorrhages of Pregnancy. J. H. Bloomfield. -p. 287.
Some Psychosomatic Aspects of Thyrotoxicosis. M. J. Musser. -p. 291.
*Clinical Management of Edema Based on Five Year Experience with Sodium Control. H. W. Pohle and N. W. McKitterick. -p. 294.
Outline of Procedure for Routine Roentgenologic Gastrointestinal Examinations. C. F. Sherman. -p.296.
Generalized Scleroderma: Report of Case. A. N. Bein. -p. 299.

Management of Edema.--Pohle and Mckittrick stress that rational therapy of congestive heart failure with its attendant edema should consist of rest and digitalis for the failing myocardium, adequate restriction of sodium intake and mobilization and removal of the retained sodium. Simple restriction of water will accomplish nothing but will make the patient thirsty and press cellular dehydration to the danger point. Sodium restriction in order to be effective in the average case must be kept to a daily intake of about 2 Gm. as sodium chloride. If no salt is added in cooking, the salt intake falls to 3 or 4 Gm. per day. Thus a special diet becomes necessary. The one which was first suggested by Newburgh and modified by Schemm combines two desirable features. It not only adequately restricts sodium but combines foods in such a manner that the metabolic result is an excess of acids which combine with sodium and take it to the kidney where some is excreted. This last feature is important because sodium must be kept mobilized if proper water balance is to be maintained. The authors have used this diet during the last five years and have obtained uniformly favorable results with it. They show that the acidifying agents and mercurial diuretics are useful in the initial clearing of edema but become impractical when used over long periods. The low sodium acid ash diet furnishes an efficient practical means of restricting sodium intake and promoting adequate sodium excretion over long periods. During a five year experience with the low sodium acid ash diet it has seldom been necessary to administer further acidifying agents or mercurial diuretics after edema has once been brought under control. Liberal water intake abolishes thirst, protects against azotemia and maintains adequate urinary output to insure optimum excretion of sodium.

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FOREIGN

An asterisk (*) before a title indicates that the article is abstracted below. Single case reports and trials of new drugs are usually omitted.

British Journal of Ophthalmology, London

32:65-128 (Feb.) 1948. Partial Index

Surgical Treatment of Pterygium. A. D'Ombrain. -p. 65.
Origin of Malignant Melanomata. E. Wolff. -p. 72.
Retinal Artery Occlusion. Report Illustrating Pathogenesis of Fundal Appearances and Effect of Acetylcholine. I. C. Michaelson. -p. 111.

British Medical Journal, London

1:379-426 (Feb. 28) 1948

Scepsis Scientifica. G. Jefferson. -p. 379.
Bactericidal Action of Streptomycin. L.P. Garrod. -p. 382.
*Calciferol in Treatment of Cutaneous Tuberculosis. G.D. Powell, P.R. Pearsall and J.E.M. Wigley. -p. 386.
Retroperitoneal Hemorrhage in Pregnancy. J.M. Ogden. -p. 389.
Clinical Value of Some Methods of Estimating Erythrocyte Sedimentation Rate. J.R. Sinton. -p. 391.
Erythrocyte Sedimentation Rate: Effect of Alcohol as Contaminant. W.O. Sykes. -p. 393.

Calciferol in Cutaneous Tuberculosis.—Powell and his associates report observations on 12 patients with cutaneous tuberculosis treated with calciferol. The drug was given by mouth either in doses of 50,000 units three times daily together with calcium or in doses of 600,000 units twice weekly. In some instances first the one and then the other method was used. The 12 patients have been under treatment for nine months or longer. Six were cured, 3 were much improved, 2 showed little improvement and 1 showed no response. Results obtained with calciferol in larger groups by other investigators indicate that about 60 per cent of patients will be cured and an additional percentage will be improved. The authors describe the effects of calciferol on the blood chemistry and suggest that the therapeutic effects are due to the increase in the body's resistance. It does not seem to have any direct toxic effect on the tubercle bacillus. In cerebral tuberculomas and in tuberculous meningitis it was without effect, but in bronchopneumonic phthisis it produced some improvement. Calciferol produced some improvement in the general condition in a patient with pemphigus vulgaris. In a patient with lymphocytoma, in whom a lesion had been improved by roentgen treatment, calciferol was used for a fresh lesion and effected healing in four months. A case of granuloma annulare failed to respond to calciferol, but a case of multiple myelomatosis improved while on calciferol.

Glasgow Medical Journal

29:49-70 (Feb.) 1948

Difficult Case of Stress Incontinence. T.L. Chapman. -p. 49.
*Osteomalacia Associated with Steatorrhoea: Report of Case. D.W. Short. -p. 53.

Osteomalacia Associated with Steatorrhoea.—Short reports a case of osteomalacia in a woman aged 50. Chronic invalidism and severe deformities resulted in a comparatively short period of time. The onset of the disease about six years ago was characterized by asthenia so extreme as to simulate paralysis, and this was followed by progressive skeletal changes. There is no history of tetany, nor was there clinical evidence of it when she was examined later. Since osteomalacia is so frequently associated with and exacerbated by child-bearing, it is interesting that the patient had ten pregnancies within the space of sixteen years without any evidence of the disease. Her diet appears to have been adequate, and the deficiency seems to have been due to defective absorption of calcium from the bowel. She has a persistent steatorrhoea, which may be due to a pancreatic insufficiency. The author has observed 2 other probable cases of osteomalacia in recent months. This disease especially in less gross forms, is not uncommon and should be borne in mind as a possible cause of skeletal dystrophy in adults.

J. Royal Inst. Public Health and Hygiene, London

2: 40-75 (Feb.) 1948

History of State Medicine in England; the Fitzpatrick Lectures, 1947: the Foundations of National Health Services. A. S. MacNalty. -p. 48.

2: 76-113 (March) 1948

Organization of Nervous System: I. Elements of Nervous Activity. E. D. Adrian. -p. 82.
Id.: II. Effects of Sense Organs. E. D. Adrian. -p. 92.
Id.: III. Activity of Brain. E. D. Adrian. -p. 102.

Lancet, London

1:273-312 (Feb. 21) 1948

*Problems in Epidemiology of Poliomyelitis. D. M. Horstmann. -p. 273.
Diphtheritic Polyneuritis in the Far East. A. D. Leigh. -p. 277.
*Tuberculous Cystitis: Transplantation of Remaining Ureter. F. C. Pybus and J. D. T. Jones. -p. 280.
Determination of Hemoglobin: III. Reliability of Clinical and other Methods. R. G. MacFarlane, E. J. King, I. D. P. Wooton and M. Gilchrist. -p. 282.
Crush Syndrome and Traumatic Uremia. J. H. Hicks. -p. 286.
Chronic Bilateral Spontaneous Pneumothorax: Difficulties in Treatment. C. F. Hoskins. -p. 288.

Epidemiology of Poliomyelitis.—Horstmann shows that the epidemiology of poliomyelitis still presents many challenging problems. In spite of all the information collected by many investigators in many lands we still cannot say why poliomyelitis suddenly became epidemic almost sixty years ago, why it is increasing rather than decreasing like other infectious diseases, why it is a summer disease with a preference for certain lands, how it is spread or how it may be prevented. Research on poliomyelitis must be continued.

Tuberculous Cystitis.—In each of the 4 cases reported by Pybus and Jones tuberculous cystitis developed or persisted after removal of a tuberculous kidney and was treated by transplantation of the remaining ureter into the pelvic colon. In none was there evidence, at the time of transplantation, of tuberculosis in either the remaining kidney or its ureter. Three of the 4 patients were alive from three to nearly five years after the transplantation. The fourth patient died fifteen months after operation, the exact cause of death being unknown. The results in these cases seem to justify more frequent use of this operation.

Quarterly Journal of Medicine, Oxford

17:1- 94 (Jan.) 1948

Chronic Hemolytic Anemia with Hemoglobinuria. Marchiafava-Micheli Syndrome. M. D. Hickey and L. H. Malley. -p. 1.
Anomalies of Intestinal Absorption of Fat: II. Hematology of Idiopathic Steatorrhea. W. T. Cooke, A. C. Frazer, A. L. P. Penney and others. -p. 9.
*Idiopathic Pulmonary Hemosiderosis (Essential Brown Induration of Lungs). W. G. Wyllie, W. Sheldon, M. Hodian and A. Barlow. -p. 25.
*Treatment of Arsenical Dermatitis with Dimercaptopropanol (BAL). A. B. Carleton, R. A. Peters and H. H. S. Thompson. -p. 49.
Remarks Regarding Chronic Jaundice. F. P. Weber. -p. 81.
*Severe Hypertension in Young Persons: Study of 50 Cases, R. Platt. -p. 83.

Idiopathic Pulmonary Hemosiderosis.—Wyllie and his associates regard idiopathic pulmonary hemosiderosis or essential brown induration of the lungs as rare; they were able to find reports of only 17 cases in the literature up to 1947. They review 7 additional cases which were observed between 1938 and 1947. The condition seems to commence usually in early childhood, often in infancy. There appears to be no hereditary predisposition. The clinical signs are periodic attacks of dyspnea and cyanosis, associated with hypochromic anemia with hemolytic features. Hemoptyses, hematemeses and abdominal pain may be present. Physical signs in the chest are insignificant by comparison with radiologic signs. Changes are confined to, or maximal in, the lesser circulation. Myocardial changes, if present, are insufficient to account for the pulmonary lesions. Anemia is secondary, and in some instances there is even a compensatory rise in the red blood cell count when anoxemia with dyspnea and cyanosis supervenes in the final stages of the disease. Increase of reticulin, collagen and muscle, and decrease of elastic fibers in the pulmonary interstitial tissue lead to lack of distensibility of the lungs with consequent peripheral stasis in the capillary bed. This is followed by hemorrhage by diapedesis and deposition of hemosiderin. The onset is insidious. The intermittent periodic course and the increasing severity of the clinical picture are explained by the fact that ever larger portions of the lungs become affected. Anoxemia leads to dyspnea and cyanosis. Hemoptyses and hematemeses may occur. Subpleural hemorrhages, particularly in the region of the diaphragm, may give rise to referred abdominal pain. Hemosiderin deposits, fibrosis and areas of collapse are the pathologic basis of the radiologic appearances. Pulmonary hemosiderosis is not part of a generalized hemosiderosis and has no relation to hemochromatosis, since there is no general disturbance of iron metabolism. The prognosis is bad. Although 5 of the 7 patients whose histories are reviewed are alive, only 1 is in fairly good general condition.

BAL in Arsenical Dermatitis.—Carleton and his associates give an account of 44 cases of arsenical dermatitis treated with 2,3-dimercaptopropanol (BAL); 41 of these infections were of the acute exfoliative type. Three cases ended fatally, and in 4 more it was impossible to assess the progress numerically. In the remaining 37 cases the mean number of days between the first injection of BAL and healing or practically complete healing was 21.5 days. Abscesses at the injection sites developed in 8 cases.

Severe Hypertension in Young Persons.—Platt reports 191 personally observed cases of hypertension, to which have been added 5 cases of latent or chronic nephritis, in which hypertension was present. These cases form a consecutive and unselected series studied during the last thirteen months. Among the 191 cases of severe hypertension 45 occurred in persons under the age of 40 years. Of these, only 13 appeared to be cases of essential hypertension. No case of malignant hypertension in a patient under 34 years was seen. Young persons with the malignant type of hypertension nearly always have secondary hypertension, the underlying cause of which is often pyelonephritis, which may be on the background of a congenital abnormality. When cases of secondary hypertension were excluded, the average ages of patients with malignant and benign hypertension in the present series were 45.2 and 53.2 years, respectively. Taking into account the likelihood that patients with benign hypertension do not complain of symptoms for many years after their disease begins, it seems probable that benign and malignant hypertension have a similar age of onset. It is generally assumed that in persons under the age of 35 years, chronic nephritis is the commonest cause of hypertension. The author's experience is the reverse of this, since only 5 cases of chronic nephritis were observed during the time that these 24 cases of hypertension in patients under 35 years of age were collected. It is possible that many cases of hypertension are wrongly diagnosed as chronic nephritis.

Nordisk Medicin, Gothenburg

37:51-102 (Jan. 9) 1948

Some Problems for Physician Today. H. Berglund. -p. 51.
*Electrocardiographic Signs of Myopathy in Neurasthenia. N. Veflingstad. -p. 55.
*Heart Disease in Thyrotoxicosis. Cases and After-Examination. E. Vogt. -p. 58.
*Myxedema Heart and Other Cardiac Symptoms in Hypothyreosis. S. Aarseth. -p. 62.
Technic in Hypoxemia Test. B. Suopanki. -p. 66.
Effect of Acceleration and Blood Supply to Brain. S. Åkesson. -p. 70.
Endobronchial Treatment of Pulmonary Abscess. J. L. Hansen and C. M. Smidt. -p. 77.
Weltmann Reaction in Hepatic Diseases. J. Schwerin. -p. 79.
Morphine in Diseases of Heart. Indications and Contraindications. A. Schrumpf. -p. 81.
*Ambulant Vitamin E Therapy in Diseases of Heart. N. J. Gram and V. Schmidt. -p. 82.

Electrocardiographic Signs of Myopathy in Neurasthenia.—In 10 of 46 cases of neurasthenia Veflingstad found changes in the coronary part of the electrocardiogram in the form of low or negative T waves on several leads. There were no signs of organic heart disease, and subjective cardiac symptoms were slight. The changes are regarded as purely functional and due to a preponderance of sympathicotonic impulses on the coronary circulation.

Heart Disease in Thyrotoxicosis.—Vogt states that of 419 patients with thyrotoxicosis treated in Drammen Hospital from 1935 to 1944 45, or 10.7 per cent, 4 men and 41 women, had cardiac disease with auricular fibrillation, enlargement of the heart or cardiac insufficiency. Thirty-eight patients underwent operative intervention, with subtotal strumectomy in 31 and hemistrumectomy in 7. Follow-up after an average of four years showed that 32 of the 38 patients were living, 5 still had thyrotoxicosis but were considerably improved, while 27 had no thyrotoxicosis. The late prognosis for patients not operated on was poor in most but not all cases. After the usual preoperative treatment strumectomy was tolerated remarkably well even by patients with considerable cardiac insufficiency. There were 3 postoperative deaths; recurrence was observed in 3 cases. Among the 27 patients without thyrotoxicosis cases of cardiac insufficiency were reduced from 9 to 1, cases of continuous fibrillation from 12 to 3, and intermittent fibrillation had disappeared. Improvement in work capacity paralleled the improvement of insufficiency. In most cases no other cause of the heart disease than the thyrotoxicosis was demonstrable; in a minority of cases there was evidence that it depended on hypertension, valvular defect or coronary sclerosis.

Myxedema Heart and Other Cardiac Symptoms in Hypothyreosis.—Hypothyreosis is often accompanied by cardiac symptoms either due to hypothyreosis itself or appearing as a more independent complication. Most important are the so-called myxedema heart and coronary sclerosis; they may appear in combination. Myxedema heart is often associated with myxedema and disappears on specific treatment simultaneously with the other symptoms of myxedema. The electrocardiographic changes in myxedema heart agree with the establishment of fluid in the pericardium, shown by a number of investigators to be

the cause of the large heart of myxedema. There are probably also functional changes. The roentgenologic and electrocardiographic changes due to coronary sclerosis, true hypertrophy and fibrosis are irreversible. Ten cases of hypothyreosis are reported in women aged from 37 to 73 who have been treated during the last two years. Four had myxedema, 2 of these with the fully developed myxedema heart, 2 with the early form. In 1 patient with well established myxedema and signs of coronary sclerosis a fatal cardiac infarct occurred during thyroid treatment; 1 patient reacted to the treatment with fibrillation; 1 with postoperative hypothyreosis had paroxysmal tachycardia during treatment, and in 1 of the myxedema patients the supraventricular extrasystole present before treatment disappeared during thyroid medication.

Ambulant Vitamin E Therapy in Diseases of Heart.—Gran and Schmidt say that they cannot confirm the Canadian results of this therapy in cardiac disease. "Ephynal" (synthetic vitamin E) gave no improvement in 63 of 80 patients, mainly with arteriosclerotic disease of the heart. Five patients showed definite improvement, and in 12 there was subjective improvement which cannot with certainty be ascribed to the vitamin. The effect observed, if due to vitamin E, must be assumed to depend on improvement in the condition of the blood vessels, especially of the coronary vessels, and must be considered as purely local.

Prensa Médica, Buenos Aires

35:157-182 (Jan. 23) 1948. Partial Index

*Galli Mainini's Test for Pregnancy. R. M. Piat and H. J. Suer Boero. -p. 165

Galli Mainini's New Test for Diagnosis of Pregnancy.—The male toad, Bufo arenarum Hensel, is used for the test, which consists of microscopic examination of the toad's urine, obtained from the toad's cloaca, after the animal is given a subcutaneous injection of 10 cc. of the morning urine of the woman suspected of pregnancy. The response is observed in two to three hours. Positive result consists of the appearance in the toad's urine of spermatozoa. Pinto and Suer Boero carried out this test on the urines of 158 pregnant women, 16 women in labor or puerperium and 80 women with gynecologic disease. The test has the advantages of being simple, rapid, specific and economical. False reactions do not occur. It is advisable to use two male toads for each test. The test gives negative results during labor and puerperium and in cases of hydatidiform mole, even when the Friedman reaction in the last mentioned case is positive.

Semaine des Hôpitaux de Paris

24:303-342 (Feb. 10) 1948

*Vagotomy for Ulcers (Dragstedt's Operation). A. Monsaingeon. -p. 303.
Considerations on Ventricular Hydrocephalus. M. Feil. -p. 317.
Some New Points of View Concerning Protein Diet in Course of Infections and Surgical Conditions. J. Trémolieres and G. Péquignot. -p. 320.

Vagotomy for Ulcers.—Monsaingeon discusses Dragstedt's operation on the basis of reports in the literature and of 6 cases in which section of the vagus was performed at Cadenat's Surgical Clinic in Paris. The effect of vagotomy on the secretion of gastric juice is limited to the initial phase of hydrochloric acid secretion (psychic phase). The insulin test is essential to determine the complete or incomplete character of the vagotomy but does not offer a complete picture of the effect of vagotomy on the secretion of gastric juice; the duration and importance of these effects have not yet been fully elucidated. The secretion of the vagotomized stomach may be modified by the administration of urethane of beta-methylcholine or carbaminoylcholine chloride. The latter may partially restore the motility of the stomach without reestablishing the secretion at its preoperative level, for which a triple dose would be required, and without jeopardizing or delaying the cicatrization of the ulcer. Vagotomy does not abolish hunger. No tendency to spasm was observed after vagotomy at the cardiac or pyloric sphincters. Early roentgenographic examination of the gallbladder after a Boyden meal in 2 cases of vagotomy showed that the gallbladder was evacuated within twenty to forty minutes; in 3 cases, six to nine months after the vagotomy, a disturbance of the evacuation of the gallbladder was observed. Diarrhea occurred occasionally either immediately or six to ten months after the operative intervention. Vagotomy is recommended for recurrent duodenal ulcers that are refractory to conservative treatment but not of the bleeding or stenosing type. It will probably be the method of choice for jejunal ulcers occurring after gastrectomy.

Wiener klinische Wochenschrift, Vienna

60:105-120 (Feb. 20) 1948

Actu l Problems of Pediatricism. E. Glanzmann. -p. 105.
*Penicillin Treatment for Hematogenic Osteomyelitis. P. Wilflingseder. -p. 109.
Vegetative Cardiac Attacks of Jarisch-Herxeld-Type. K. Polzer and W. Schober. -p. 114.
One Hundred Retropubic Prostatectomies. H. Uebelhör. -p. 117.

Penicillin in Hematogenous Osteomyelitis.—Wilflingseder treated 24 patients, 22 of whom were less than 15 years of age, 18 with acute hematogenous osteomyelitis and 6 with chronic osteomyelitis, by intramuscular administration of penicillin. In 9 additional cases of acute osteomyelitis, children were treated with sulfonamide drugs, blood transfusions and immobilization. Doses of 1,000,000 to 2,000,000 units of penicillin proved sufficient in children in whom treatment was initiated in the first days of the disease. Three million units and more were required when treatment with penicillin was started only in the second or third week of the disease. Penicillin treatment must be continued until the pus becomes sterile, the temperature has been restored to normal, and pain and swelling of joints and soft tissues have subsided. These results were obtained in a girl aged 6 years only when the daily dose of the drug was increased to 300,000 units. In patients with subperiosteal abscess local application of penicillin was carried out by plombage of the abscess with instillation of 100,000 to 200,000 units of the drug. Within twenty-four hours of the instillation the punctate was sterile and the pus itself exerted a bacteriostatic effect on the Staphylococcus aureus. In 17 of the 18 acute infections complete recovery occurred in the absence of sequestration or formation of fistula. Partial stiffness due to sequestration and involvement of the joint occurred only in 1 case in which the dosage of penicillin was too small (600,000 units). Death occurred in 2 of the 9 patients with acute forms of the disease treated with sulfonamide compounds; 3 patients recovered, and 4 had a chronic course with sequestration and formation of fistula. There was no recurrence for year in 4 of the 6 patients with chronic osteomyelitis treated with penicillin, and fistulas which had remained open for two to five years were closed. There was no improvement in 1 patient, and in another progressive osteomyelitis with sequestration in both lower extremities could not be controlled even with 3,000,000 units of penicillin.

Book Notices

Textbook of Embryology. By Harvey Ernest Jordan, M.A., Ph.D., Sc.D., Professor of Anatomy and Director of the Anatomical Laboratories, University of Virginia, Charlottesville, and James Ernest Kindred, M.A., Ph.D., Professor of Anatomy, University of Virginia. Fifth edition. Cloth. Price, $7.50. Pp. 613, with 501 illustrations. D. Appleton-Century Co., Inc., 35 W. 32d St., New York 1, 1948.

This work has always been distinguished by its effective use of illustrations and its emphasis on histogenesis. Recent editions have added significant data from experimental embryology and a painstaking documentation. The latter means nothing to the medical student but is of value to the instructor who wishes to judge the evidence for himself.

It grows increasingly difficult to keep successive editions of a textbook up to date without increasing its bulk and adding to the already exorbitant cost to the student. The present work illustrates various such difficulties. Thus in the new discussion of the menstrual cycle the old homology (Aristotle, Heape, etc.) of proestrus bleeding with menstruation is retained, although this interpretation has been disproved by histologic and hormonal studies. The chapter on the age of human embryos is chaotic because of the inadequacy of our present knowledge as to the time of ovulation, its relation to conception and the great variability in the time that may elapse between the death of the embryo and its abortion. In view of our ignorance one wonders what the effect on the student is when he comes on a mathematical formula for determining the age of an embryo from its length, which is by no means constant for any stage of development.

The old germ layer dogma is carried over (page 46) from the first edition, at which time conclusive evidence as to the derivatives of the neural crest (mesectoderm) was already five years old. In this table we also read that the iridial musculature arises "possibly from the ectoderm." Actually the dilator is from its first appearance and throughout life the contractile part of the myoepithelial cells which compose the pars iridica retinae. Any good preparation of a suitable stage shows the sphincter arising from the pigmented retina.

Each new edition of this and other embryologies has more of the splendid illustrations from the Carnegie Contributions to Embryology. The best are all from the pen of James Didusch, checked by G. L. Streeter. It is surprising, then, to encounter the grossly incorrect figure of Dandy's embryo (page 329), together with his naive interpretation of its nervous system. Similarly the old His figures remain, although they were corrected in 1916 by Hochstetter, whose monographs are omitted from the bibliography. Other errors include calling the brachium pontis a "commissure" and stating that the "cervical" flexure marks the junction of brain and cord.

A and *B* of figures 285 and 287 are misleading, as they have been shown to be chance variations rather than evidences of early sex differences in the external genitalia. Another figure that needs to be replaced is the atrocious reproduction of the youngest Hertig-Rock ovum (fig. 61).

In view of the emphasis on hemopoesis one wonders that the Rh factor is not mentioned.

This book is too useful to be handicapped by errors and should have the outdated vestiges of early editions systematically deleted.

Studies on Carbohydrate and Fat Metabolism with Especial Reference to the Pigeon. By Oscar Riddle and Associates, Department of Genetics, Carnegie Institution of Washington, Carnegie Institution of Washington Publication 569. Paper. Price, $1.85. Pp. 128, with 1 illustration. The Institution, 1530 P St., Northwest, Washington 5, D. C., 1947.

The investigations reported in this volume were carried out in an attempt to determine which pituitary hormones regulate carbohydrate and fat metabolism. The immature pigeon was used in most of the experiments. In some cases doves, rabbits and rats were also used. The data are presented in numerous tables showing the influence of the various hypophysial hormones (supplemented at times by other hormones) on carbohydrate and fat metabolism. The influence of ablation of various endocrine glands was also observed. The results of this study support the view that, in pigeons, very few anterior pituitary hormone share significantly in the regulation of blood sugar, muscle and liver glycogen, liver fat and ketosis. Anterior pituitary control of these processes is exerted chiefly through corticotropin, prolactin and thyrotropin. Posterior lobe products exert relatively slight effects. Curves describing the level of blood lipid at all phases of the reproductive cycle were constructed for pigeons and doves.

Incidental to these investigations, the data brought to light certain interesting aspects of the physiology of the pigeon in which there was a decided difference from that of mammals. To quote a few instances: Hypophysectomy in the pigeon is followed by an increase of liver glycogen, whereas in mammals it is followed by a decrease. Birds survive higher doses of insulin. The adult reproducing pigeon shows cyclic glycemias and lipemias associated with egg production, a phenomenon not noted in mammals. As Dr. Riddle states in closing, "Most of these differences can be neither satisfactorily interpreted nor discussed at present; they stand as challenges to further research."

Hearing Aids and Audiometers: Report of the Committee on Electro-Acoustics. R. G. Radley, C.B.E., B.Sc. Ph.D., Chairman. Medical Research Council Special Report Series No. 261. Paper. Price, 1s. 3d. Pp. 71, with 28 illustrations. His Majesty's Stationery Office, York House, Kingsway, London, W. C. 2, 1947.

This pamphlet is a study of hearing in connection with the socialized medical program of the British Ministry of Health, comprised largely of scientific information which is in part a review of the literature of both the United Stated and Britain and in part original work done by the Committee on Electro-Acoustics. The committee has two principal tasks assigned: (1) to determine the practicability of designing a single type of electrically operated hearing aid which would be small, light, reasonably cheap to produce and service, and capable of giving good intelligibility of the spoken word to the majority of persons with deafness of types that can be benefited by mechanical appliances; (2) to determine satisfactory performance specifications for pure tone audiometers for use in the early diagnosis and accurate assessment of deafness of different types. The pamphlet is of major interest to the otologist and gives a good account of what is being done in England to assist those who are hard of hearing.

Applied Medical Bacteriology. By Max S. Marshall, Ph.D. With the collaboration of Janet B. Gunnison, M.A., Alfred S. Lazarus, Ph.D., Elizabeth L. Morrison, M.A., and Marian C. Sheehy, A.B., Division of Bacteriology, Medical Center of the University of California, San Francisco. Fabrikoid. Price, $4.50. Pp. 340, with 10 illustrations. Lea & Febiger, 600 S. Washington Square, Philadelphia 6, 1947.

This book includes fourteen chapters. The first five are concerned with microscopy, sterilization and disinfection, glassware, culture mediums and cultivation, isolation and general technic. Other chapters are devoted to the use of laboratory animals, serologic technic, viruses, yeasts and

molds, sanitation, biologic products, specimens and classification. Finally, the last chapter, occupying one hundred and sixty pages, is entitled "Diseases." Under this chapter some sixty-seven diseases are discussed, and for each disease a brief clinical description and the causative agent are given followed by a discussion of the specimens to be taken, the laboratory procedures to be followed and the significant laboratory data to be included in reports. The material is well organized and the tables and illustrations are well chosen. This book should prove helpful to clinicians, public health workers and sanitary inspectors as well as students and laboratory technicians in medical bacteriology.

Anatomy and Physiology Laboratory Manual and Study Guide. By Barry Griffith King, Ph.D., Commander M(S), U.S.N.R. Naval Medical Research Institute, National Naval Medical Center, Bethesda, Md., and Helen Marie Rosar, B.A., M.A., R.N., Assistant Executive Secretary, American Nurses Association Professional Counselling & Placement Service, Inc. Section on Endocrinology rewritten by Erwin P. Vollmer, Ph.D. Lieutenant M(S) U.S.N.R. Naval Medical Research Institute, National Naval Medical Center, Bethesda, Md. Third edition. Cloth. Price, $3. Pp. 267, with 61 illustrations by M. Cartwright Baker. W.B. Saunders Co., W. Washington Sq. Philadelphia 5, 1948.

As the name implies, this book is a laboratory manual and syllabus. As such, it is beautifully illustrated with original drawings and tables which are well adapted for the class of students for which the manual was intended. The fact that it has now gone into the third edition indicates a degree of popularity which cannot be disregarded. It is elementary, to be sure, but evidently well suited to the class of students using it. It can be well recommended to any one interested.

Pharmacology and Experimental Therapeutics: A Survey for 1941-1946. By Hamilton H. Anderson, Fumio Murayama and Benedict R. Abreo. Cloth. Price, $6 50. Pp 368. University of California Press, Berkeley 4, 1947.

The title of this book is somewhat misleading. The subject matter consists of brief abstracts of toxicologic and therapeutic information gleaned from the medical literature published during and subsequent to World War II. The drugs are arranged alphabetically, and only those which were subject to investigation during the period covered by the survey are included. Fortunately many of the older drugs were reinvestigated during the war years, and thus the volume contains information not only on the new synthetic chemicals but on many of the well known older agents.

This book is useful only when consulted in conjunction with other reference works on pharmacology and therapeutics. It may be considered as an appendix to the more extensive standard works, and as such will provide up-to-date information on recent investigations on drugs. The emphasis has been placed on quantitative toxicologic data, although metabolic and pharmacodynamic effects of the various drugs are mentioned. No attempt is made to review in a critical fashion the literature from which the data are derived.

As a supplemental reference work for pharmacologists and scientists in allied fields, this book will have some value. It is too incomplete and restricted in scope to be of interest to the practicing physician.

Caesarean Section: The History and Development of the Operation from Earliest Times. By J.M. Young, M.B., Ch.B., D.T.M. & H. With a foreword by Miles H. Phillips, M.D., B.S., F.R.C.S. Cloth. Price 16s. Pp. 254. H.K. Lewis & Co., Ltd., 136 Gower St., London, W.C.1., 1944.

This monograph on the history and development of the operation of cesarean section was originally written as a thesis for an M.D. degree at the University of Edinburgh. Professor Miles persuaded Dr. Young to enlarge it and to publish the manuscript in book form. The result is a complete story of abdominal delivery beginning in antiquity and extending to the present. A thorough search of the literature failed to discover the exact origin of the operation. The authentic history of cesarean section is divided into three periods; prior to 1500, from 1500 to 1876 and from 1876 to the present time. Prior to 1500 abdominal delivery was seldom performed and then solely for the postmortem delivery of the living child. From 1500 to 1876 sporadic operations were reported, chiefly on the continent of Europe, but recoveries were so few that the procedure was not recognized by the profession at large. The development of cesarean hysterectomy by Porro and its adoption by Sanger heralded the beginning of modern technic. However, abdominal delivery is largely a development of the twentieth century, for its successful use had to await the discoveries of antisepsis, anesthesia and the surgical skills.

The book includes chapters on the historical development of the variations of abdominal delivery as well as the surgical technic and the indications for the operation. The history of postmortem cesarean section is discussed. Finally, a short chapter is devoted to the religious and legal implications of sterilization procedures at abdominal delivery. An exhaustive bibliography is available at the end of each chapter. This historical document of one of the major procedures in obstetrics is interesting reading and will be enjoyed by obstetricians as well as by those who are students of medical history.

Kurze Klinik der Ohren-, Nasen-, und Halskrankheiten. Von Dr. Erhard Luscher, ordentlicher Professor der Ohren-, Nasen- und Halskrankheiten und Direktor der Universitätsklinik und poliklinik für Ohren-, Nasen- und Halskrankheiten in Basel, Switzerland. Cloth. Price, 54 Swiss francs. Pp 513, with 201 illustrations. Grune & Stratton, Inc., 381 4th Ave., New York 16; Benno Schwabe & Co., Klosterberg 27, Basel 10, 1948.

A short clinic on diseases of the ear, nose and throat by Erhard Luscher appears to be the first postwar compendium in German. In his attempt to present a practical manual for students and general practitioners the author has unquestionably succeeded. Since the work was not primarily intended for the otolaryngologist, it will have no more than an academic interest to the specialist in this field. The entire subject matter, including bronchoesophagology, is well classified. Beginning with a brief descriptive anatomic review which is well illustrated by two hundred and one partly colored and exceptionally detailed drawings, the author proceeds to give a comprehensive presentation of the physiology of organs in this field.

Following a brief discussion of the instrumentarium required for a thorough otorhinolaryngologic examination, the author devotes considerable space to important clinical pictures and procedures found and utilized in the practice of this specialty. Thus, in his discussion of an ear examination, he stresses the importance of the appearance of the membrana tympani and describes thoroughly the use and importance of the eustachian catheter. For completeness, as is to be expected, he includes a discussion on audiometry. In his presentation of diseases of the middle ear, he explains sero-otitis or barotrauma and discusses thoroughly the problem of early surgical intervention in acute otitis

media and acute mastoiditis. It is his opinion that early intervention in such cases is to be condemned and that only absolute indications should prevail.

On the diseases of the nose, nasal hemorrhage and fractures receive most of his attention. He proffers many specific prescriptions and methods of treatment but again ascribes considerable importance to anterior and posterior tamponades in cases of nasal hemorrhage. He considers rather extensively dermatoses of the external nose, allergy, hay fever and rhinitis. It is interesting that in his discussion of sinusitis he recommends suction in both acute and chronic phases of the disease but makes no mention of the Proetz treatment as such.

In the diseases of the throat, the tonsil and adenoid problem receives a detailed discussion the author advising the removal of these structures only by competent specialists. It was somewhat surprising to read that he considers a suspicion of tuberculosis of the neck glands as an indication for tonsillectomy. He also recommends early tonsillectomy in about six or eight days following acute peritonsillar abscess. In considering the the question of focal infection, he agrees with the French authors that approximately 60 per cent of the latent sepsis is due to focal infections in the tonsils and that since neither sulfonamide or penicillin therapy is able to sterilize the primary focus a tonsillectomy is indicated.

Besides the usual prescriptions for pharyngitis, the author recommends balneotherapy and gives a list of twenty-four hot and cold springs in Switzerland alone. He takes occasion here to issue a special warning to general practitioners not to attempt removal of foreign bodies and manual procedures in the throat, hypopharynx and esophagus particularly in babies, where such procedures may result in the aspiration of the object into the lung or in pushing it into the stomach.

The diseases of the larynx found only a short discussion but, the illustrations were exceptional in their clarity and educational value. In small slowly growing, circumscribed carcinoma of the larynx the author is satisfied with a transthyroideal cordectomy. He claims good results with this procedure and cites the results of other European authors. He recommends this type of surgery particularly in those patients who use their voice professionally. He is in full agreement with those who advocate preoperative roentgen therapy in an attempt to reduce the size of the tumor. For those patients who require a total extripation, he strongly recommends preoperative treatment with fractional dosage of roentgen radiation. After a short description of the neurogenic and functional disturbances of the larynx, the book closes with an extremely interesting chart of the new and old nomenclature. The new nomenclature was in all probability adopted by an international forum known as the I.N.S. (Nomina Anatomica, 1935).

Medicine. Volume One: The Patient and His Disease. By A.E. Clark-Kennedy, M.D., F.R.C.P., Physician to the London Hospital and Dean of the Medical School. Cloth. Price, $6. Pp. 383. Williams & Wilkins Co., Mount Royal & Guilford Aves., Baltimore 2, 1947.

To the student accustomed to the dry routine presentation of the subject of medicine in the manner of the usual textbook, Dr. Clark-Kennedy's monograph will make both interesting and stimulating reading. This is definitely not a textbook in the ordinary sense but rather a manual of instruction on the art of the practice of medicine. The patient is presented as a whole individual as met in the hospital bed or office and discussed as an organism with body and mind, reacting to the sum of hereditary factors and environment. It teaches the approach to the patient and the method of thought that should be employed in the analysis of the patient's symptoms and signs. Volume I presents a concept of all branches of medicine in a philosophical as well as scientific manner, correlated in writing as the practitioner must do in his thought when faced with the patient and his problem. It is divided into six chapters, with titles consecutively as follows: body and mind, symptoms, symptoms and signs, heredity and environment, reactions of the body and mind, and the nature of disease. The book is definitely not for the beginner in medicine.

Signs and Symptoms: Their Clinical Interpretation. Edited by Cyril Mitchell MacBryde, A.B., M.D., F.A.C.P., Assistant Professor of Clinical Medicine, Washington University School of Medicine, St. Louis. Cloth. Price $12. Pp. 439, with 86 illustrations. J. B. Lippincott Company, 227-231 S. 6th St., Philadelphia 5, 1947.

In this volume a number of competent practitioners present basic considerations in the diagnosis of disease, making altogether one of the most instructive books available for either specialists or general practitioners. The chapters are devoted to the taking of the history of the patient and the analysis of symptoms such as pain, headache, sore tongue and sore mouth, fever, unconsciousness, swelling, loss of motion cough and change of weight. Here in concentrated form is graduate education of high quality. The illustrations are excellent and adequately supplement the text, as does a detailed index.

Liberia. By Charles Morrow Wilson. Cloth. Price, $3.75. Pp. 226 with illustrations. William Sloane Associates, Inc., 119 W. 57th St. New York 19, 1947.

The year 1947 marked the centennial of Liberia as a republic. This book is a history of the early colonization of the country, the establishment of a commonwealth and ultimately the republic. The country is situated near the African Gold Coast; it has a land area of approximately 45,000 square miles and an estimated population of 1,600,000. Ninety-five per cent of the people are members of indigenous tribes. Citizenship and property rights are restricted to peoples of African blood.

For many years the culture and economy of Liberia were similar to others of the dark continent. Little progress was noted until the Firestone Tire & Rubber Company began developing some of the natural resources and introduced Hevea plantations. These plantations were a potent supply source of natural rubber for America and Allied nations.

Of interest to those associated with medicine is the important role of modern medicine in the cultural and economic advancement of the country. Although medicine is touched on throughout the book, one chapter, "Liberia and Medicine," deals more specifically with medical problems. For years modern medicine was unknown. George W. Harley, M.D., medical missionary, founded and still directs an impressive clinic in the tribal countryside of Ganta. His work and the medical personnel and facilities available through Firestone have brought scientific care to many Liberians.

There are still areas where the native medicine man is the only practitioner available to treat the natives. In the language of the Mano tribe "Nye ke mi" means the person who makes medicine—the doctor. Whatever his tribe, he is an important person acting as priest, physician and philosopher—much as the modern medical doctor is to his patients in more advanced countries.

Illustrations of Regional Anatomy. By E. B. Jamieson, M.D. Section I: Central Nervous System; Section II: Head and Neck; Section III: Abdomen; Section IV: Pelvis; Section V: Thorax; Section VI: Upper Limb; Section VII: Lower Limb. Seventh edition. Paper. Price, Section I, $3.50; Section II, $4; Section III, $3; Section IV, $2.50; Section V, $2.50; Section VI, $3; Section VII, $3.50. Pp. 51, with 51 plates; 52-115, with 64 plates; 116-159, with 44 plates; 160-194, with 35 plates; 195-226, with 52 plates. Williams & Wilkins Co., Mt. Royal & Guilford Aves., Baltimore 2, 1947.

This set is basically a cumulative record of the author's own dissections and teaching efforts. Occasional minor flaws are observed; these are probably due to the progressive expansion of the scope of work and the constant improvement in the quality of the material presented. These flaws, which are observed in conjunction with some illustrations, do not involve anatomic facts. This series can be used to great advantage by the medical student as well as the practitioner. The material is presented in sufficient detail and clarity to be as helpful in the dissecting room as in the private medical library. The illustrations are good and are particularly striking in the volumes dealing with the thorax and abdomen. Another desirable feature is the fact that individual volumes can be purchased.

An Introduction to Gastro-Enterology: A Clinical Study of the Structure and Functions of the Human Alimentary Tube. By James Dunlop Lichley, M.D. Cloth. Price, $3. Pp. 143, with 21 illustrations. Williams and Wilkins Co., Mount Royal and Guilford Aves., Baltimore 2, 1947.

This is a rather ambitious title for such a small book. Probably because the writer was once a lecturer on applied anatomy the best part of the volume is on the anatomy of the digestive tract. There is a section on the physiology of the tract, another on the pathologic physiology and another on clinical applications. It would have been somewhat of a miracle if the author had been able to pack into the small space available a really adequate amount of information. Material also should have been right up to date and based more on research articles than on old textbooks. Actually the book is somewhat disappointing and one feels that the writer could have done much better.

Biochemistry for Medical Students. By William Veale Thorpe, M.A., Ph.D. Fourth edition. Cloth. Price, $5. Pp. 496, with 36 illustrations. Williams & Wilkins Co., Mount Royal and Guilford Aves., Baltimore 2, 1947.

This book, as its title implies, was written primarily for the use of medical students, and particular emphasis has been placed on problems of diagnosis. An effort has been made to supply facts and methods which the medical student should know about rather than to deal with theory. A bibliography supplying references to monographs and special articles is furnished for more detailed study. In the present edition (fourth) particular attention has been paid to the problem of the use of isotopes in biochemical investigations, and the sections on protein structure, coenzymes, flavoproteins, bile pigments and nutrition in wartime have been largely rewritten.

The general plan of the book is as follows: Following a preliminary discussion of physical-chemical principles there is discussion of substances found in tissues and food. This includes consideration of special catalysts. In part 2 problems of digestion and absorption and of intermediary metabolism are considered, as well as the role of hormones and vitamins in metabolism. Part 3 deals largely with problems of energy needs, food composition, nutritional aspects and waste products.

The small size of the book makes it easy to read, and its condensed form enables the student to learn many facts about biochemistry in an elementary way. It is unfortunate that the author expresses measurements of intestine in man in terms of feet, absorptive area in terms of square meters, and total weight in terms of stones. It is hoped, however, that in future editions the metric system will be utilized consistently.

Bovine Tuberculosis Including a Contrast with Human Tuberculosis. By John Francis, B.Sc., M.R.C.V.S. Fabrikoid. Price, 25s. Pp. 220, with 36 illustrations. Staples Press, Ltd. Staples House, 10 Cavendish Place, London, W.1, 1947.

This small volume presents rather well the subject of bovine tuberculosis. The author traces the disease from the Mediterranean littoral, particularly Rome, to Britain and Northern Europe. Finally, the infected high bred English cattle disseminated the disease to many other parts of the world.

No control was attempted until after the tubercle bacillus was found. Ostertag in Germany attempted, unsuccessfully, to wipe out the disease by killing off all the ill cattle. Bang, in Denmark, had more success by separating all calves from their mothers and starting new herds with the young animals. Since only 0.5 per cent of the young are infected at birth, this method was fairly successful. Another method, used mostly in England, was to do tuberculin tests in herds and regions and gradually separate the infected animals and eliminate them. Finally, the method used in the United States was to kill off all tuberculin reactors on a national scale. As a result, practically no tuberculosis remains in continental United States. The Federal Government, the state and the owner each bore an equal share of the loss.

Vaccination has been a total failure. BCG protection lasts only about six months, and the vaccine made from the human strain may be passed back to human beings.

The pathogenesis of the disease is considerably different from that in human beings. There is not the susceptibility in young cattle that there is in young human beings, and the complete healing of tuberculous lesions in cattle is a rarity. Reinfection lymph node complexes, rare in the human being, are the rule in cattle. Lymph nodes do not rupture into bronchi in cattle as they frequently do in human beings. Some breeds of cattle are more resistant than others. Herefords are more resistant than Jerseys, and the Zebu African cattle are the most resistant of all. About 5 per cent of tuberculous cows have metritis as a result of hematogenous dissemination, but only 1 per cent of the calves are infected. From 1 to 2 per cent of tuberculous cows have tuberculous mastitis also, as a result of hematogenous seeding. Cattle are infected generally by the aerogenous route (80 to 90 per cent) usually while in their stalls. Infection is rare in open pastures. Infection of man with bovine tubercle bacilli (where bovine bacilli are prevalent) is around 5 per cent, and about 30 per cent of tuberculous children have bovine infections due to drinking infected milk. Cattle are only slightly susceptible to avian and human strains of tubercle bacilli.

Some good photographs of typical bovine lesions, appropriate charts and tables and an easily readable type make the work a worthy addition to the literature of comparative medicine.

Queries and Minor Notes

THE ANSWERS HERE PUBLISHED HAVE BEEN PREPARED BY COMPETENT AUTHORITIES. THEY DO NOT, HOWEVER, REPRESENT THE OPINIONS OF ANY OFFICIAL BODIES UNLESS SPECIFICALLY STATED IN THE REPLY. ANONYMOUS COMMUNICATIONS AND QUERIES ON POSTAL CARDS WILL NOT BE NOTICED. EVERY LETTER MUST CONTAIN THE WRITER'S NAME AND ADDRESS, BUT THESE WILL BE OMITTED ON REQUEST.

CHRONIC HEPATITIS

To the Editor:—A 28 year old white female patient in March 1947 experienced headache, malaise, anorexia, moderate pain in the upper part of the abdomen and in the lumbar region, nausea, vomiting and diarrhea. She ran a low grade fever. Physical examination revealed a palpable tender liver and moderate inguinal and cervical lymphadenopathy, as well as pharyngitis. Blood count and hemoglobin were normal; the blood Wassermann reaction was negative. The urine was dark brown, and the thymol turbidity test positive in result. The icterus index was 9; cephalin flocculation reaction was 4 plus, and the sulfobromophthalein sodium test normal in result. The patient was treated with rest in bed, a diet low in fat, infusions of 5 per cent glucose, vitamin B complex and sulfadiazine, 1 Gm. every four hours. After six weeks of rest in bed there was symptomatic improvement, but the cephalin flocculation reaction remained 2 plus. In August of 1947, while on vacation, the patient experienced severe diarrhea, and a Salmonella organism was cultured from the stool. After therapy with succinylsulfathiazole and sulfasuccidine the cultures became negative. However, at this time the patient again experienced pain in the right upper part of the abdomen; nausea, vomiting, headache and mild diarrhea persisted. Several tests showed a persistent 2 to 3 plus cephalin flocculation reaction, and normal sulfobromophthalein sodium reaction. The blood alkaline phosphatase and albumin globulin ratio were normal and the icterus index 6. The patient was put on rest in bed for three months and a diet high in protein and in methionine advised. Vitamin B complex and folic acid were prescribed. A course of dehydrocholic acid was given, 1 tablet three times a day. At the present time the patient is again at work, and on a regular diet with no medication. She has occasional severe headache and nausea, and persistent soreness in the hepatic region. The cephalin flocculation reaction remains at 2 plus, and sulfobromophthalein sodium reaction normal. Would a liver aspiration biopsy be advisable, or justified in this case? What value, or danger if any, is there in the use of sulfadiazine, folic acid and dehydrocholic acid in this case? What diagnostic procedures would be of value in following this case, and what therapeutic program is suggested? What is the prognosis?

M.D., New York.

ANSWER.—The history and findings in this case are consistent with those present in a diagnosis of infectious hepatitis, although the minimal degree of icterus places the case in the category of anicteric cases. Symptoms of the type described are oftener encountered in areas where the disease is epidemic than where it is sporadic, and one wonders whether this patient had any contact with other persons suffering from the disease or whether there is any history of antecedent use of blood or plasma. The complicating Salmonella infection is not unusual and is not necessarily connected with the relapse of hepatitis which the patient apparently had thereafter.

Residual malaise with pain and soreness in the region of the liver may indicate low grade chronic hepatitis. Such symptoms, however, may be of little clinical significance, since some degree of retention of sulfobromophthalein would be expected if the hepatitis were active. In regard to other tests of hepatic function in this patient, the only definite finding mentioned is the weakly positive result of the cephalin cholesterol flocculation test, which is hardly sufficient for diagnosis. The thymol turbidity test and the test for determination of serum bilirubin should be repeated; the level of serum globulin should be checked. If this exceeds 3.5 Gm. per hundred cubic centimeters of serum and there is thymol turbidity in excess of 4 units, the hepatitis may still be active. Cholesterol and esters should be checked, and, if possible, quantitative studies of the urobilinogen content of the urine should be performed. As Watson and others have shown, the hepatitis may still be active so long as there is significant urobilinogenuria, no matter what other tests of hepatic function may show. In such cases, an increased excretion of the type I isomer coproporphyrin in the urine may be a concomitant finding. If the liver is readily palpable below the costal margin, a needle biopsy may be justifiable; it is conceivable that it may give information of value. The reader is referred to a recent account of the residues of hepatitis by Kunkel, Labby and Hoagland (*Ann. Int. Med.* 27:202-219 [Aug.] 1947) for more detailed information in regard to diagnosis and classification of such cases.

Treatment of chronic or relapsing infectious hepatitis in the active phase is largely a matter of rest, a diet high in calories and in protein and elimination of existing infections elsewhere in the body. In the inactive phase, the maintenance of optimal nutrition is the only requirement (Capps, R. B., and Barker, M. H.: *Ann. Int. Med.* 26:405-416 [Mar.] 1947). No benefit will accrue from the use of the sulfonamide drugs, bile salts or folic acid so far as is now known; the first two remedies may, at least in some cases, do harm. The prognosis is probably good, although the ultimate developments in chronic hepatitis are still not clearly understood.

MENOPAUSE AND FERTILITY

To the Editor:—Is there any examination acceptable to the courts in determining whether it is possible for a woman, age 56, who has passed the menopause, to bear children?

J. P. Richardson, M.D., Ellensburg, Wash.

ANSWER.—Fertility in women reaches a low ebb in the premenopausal period and is completely extinguished after the menopause. There is no likelihood of pregnancy when menses have been absent for a year. It is of interest that the oldest woman to give birth to a baby in 100,000 consecutive deliveries was 46 years old and the oldest pregnant woman was 48.

The following findings are typical of the postmenopausal period and indicative of a complete absence of fertility. Their presence in a 56 year old woman should bear considerable legal weight: 1. Atrophic changes in the external genitalia, the vagina and the uterus become increasingly evident during the postmenopausal period. 2. Endometrial biopsies reveal atrophy of the endometrium which is fairly characteristic. 3. There is a great decrease in urinary estrogens although traces of such hormones are detectable for several years after the cessation of the menses. 4. The onset of the menopause is associated with a greatly increased elimination of urinary gonadotropins (ten to fifty times the normal amount), follicle stimulating in character. 5. Only traces of pregnandiol are present in the urine, and these ultimately disappear.

CONTAMINATED WELLS

To the Editor:—For the past five months my neighbor and I have noticed an odor of gasoline in our water supply. It varies from a slightly perceptible to a disagreeably strong odor, although at no time has the water been discolored or covered with an oily film. Both our houses are supplied by driven wells 60 to 75 feet (18.3 to 22.9 meters) deep, with an outer casing of iron pipe at least 40 feet (12.2 meters) deep, and

the lead-in pipe from the well to the house is completely cemented into the casing. Both wells are within 6 feet (1.8 meters) of the houses. There are four gasoline stations in the immediate vicinity, each with underground tanks of over 500 gallon (1,890 liter) capacity. The distances are 90 feet (27.4 meters), 75 feet (22.9 meters), 250 feet (76.3 meters), and 100 feet (30.5 meters), respectively. Air pressure tests on the nearest tank revealed no leak. The other tanks were measured by stick; that is, the level of the gasoline in the tank was noted on a stick and checked after twelve to eighteen hours. Leakage was not noted with this method, which is admittedly inaccurate. The owners, however, would not or could not use the air pressure method. On opening the casing cover on one well, the odor of gasoline was distinct and a lighted match dropped in caused a flash fire. The ground was dug up for about 5 feet (1.5 meters) around this well to get to the casing, and this ground also had the odor and burned when ignited. A sample was obtained from the surface of the well, and it was a dark black oily liquid smelling strongly of gasoline. It is known that at the site of the tank 250 feet away about fifteen to eighteen years ago about 10,000 gallons (37,850 liters) of gasoline was lost through a leak in the tank that was put in underground. I have several questions on the problem: 1. Is this contaminated water harmful for drinking, cooking or washing? 2. Since each tank is owned by a different company, can chemical analysis identify different brands of gasoline? 3. Could the gasoline lost years ago be the cause of our present contamination? 4. Would digging deeper wells help us in obtaining a clean water supply? 5. Is there a filter on the market that would be of help to us?

Abraham D. Cohen, M.D., New City, N.Y.

ANSWER.—1. There is danger of lead contamination of the drinking and culinary water, as most modern motor fuels are leaded. The United States Public Health Service considers waters having lead content in excess of 0.1 part per million as unacceptable for drinking purposes. Obviously the water may be used for washing if the gasoline odor is not too objectionable. Fire and explosion hazard should be considered in the use of the wells if, as stated, the gasoline vapors in one of the wells has been ignited.

2. It is doubtful whether chemical analyses will indicate the source of the gasoline pollution unless the fuels from the various storage tanks are of distinctly different grades.

3. The gasoline which leaked into the ground years ago may be causing the contamination, but if so it is difficult to understand why it did not show up in the wells prior to five months ago. More recent gasoline spills should be considered as possible sources of pollution.

4. Drilling of deeper wells to tap lower water-bearing strata may be the solution of the problem. The well casings should be sealed to prevent entrance of the gasoline-contaminated water from near the surface of the ground. The local well drillers should be able to advise regarding the availability and quality of water from deeper strata and regarding the practicability of sealing off water from strata near the ground surface.

5. Gasoline odors can be removed by filtering the water through activated carbon if the water is not seriously contaminated. Such filters are available on the market. They will not remove lead from the water.

RADIOACTIVE IODINE

To the Editor:—In the Feb. 22, 1948 issue of the *American Weekly* is an article entitled "Atomic Energy, World's Greatest Killer of Toxic Goiter" by G. B. Lal. The atomic drink—colorless, odorless, tasteless; the dose, usually small, of radioactive iodine cured the patient. Just what is the status of radioactive iodine?

William J. Stapleton, M. D., Detroit.

ANSWER—There are still not enough observations to say definitely what the status of radioactive iodine is in the treatment of toxic goiter. From data available it appears possible to produce a cure in a relatively large percentage of patients. If the correct amount of radioactive iodine is given, one dose is usually adequate. It has the advantage that it may be given by mouth. Thyroxin, which is the most important constituent of the thyroid hormone, contains 65 per cent of iodine by weight. When iodine is given in small quantities, it is taken up almost entirely by the thyroid, and if it is radioactive it destroys the thyroid cells. Patients who have received this form of treatment have not yet been followed long enough to determine whether there are any late complications, notably carcinoma. Expensive apparatus is necessary to follow the effect of radioactive iodine in an intelligent manner. Because of the expense involved and the uncertainty concerning complications of treatment, the use of radioactive iodine has been restricted to those patients who present poor operative risks. Propylthiouracil has been used for medical management in the same types of patients.

PETIT MAL

To the Editor:—During the past several months I have had under my care a middle-aged, white hipara who has had recurrent attacks of petit mal. Trimethadione ("tridione") with phenobarbital decreased the attacks for approximately three weeks, but the attacks then recurred, and the patient's leukocyte count approached 4,500 per cubic millimeter; hence the trimethadione was discontinued. She is now on 4 to 6 Gm. of glutamic acid daily with phenobarbital. Do you have any further suggestions?

M.D., California

ANSWER.—Petit mal (pyknoepilepsy) is rare in persons of middle age. The attacks are easily confused with mild psychomotor seizures. If possible, the diagnosis should be checked by the electroencephalograph. Psychomotor seizures require from 0.3 to 0.5 Gm. of diphenylhydantoin sodium or of "mesantoin" (methylphenylethyl hydantoin) (or of both). If the attacks are petit mal, a larger dose of trimethadione than that given may be required. Neutropenia (1,600 white cells per cubic millimeter or lower) or sharp reduction in the abundance of platelets calls for discontinuance.

LEUKOPLAKIA

To the Editor:—There is a difference of opinion among the physicians at this hospital as to the best method of treating leukoplakia of the lower lip. Some favor radiation therapy, while others recommend pealing of the lesion followed by cauterization of the base. I would appreciate an opinion.

C. K. Pearless, M.D., Huntington, W. Va.

ANSWER.—Leukoplakia of the lower lip only is commonly induced by the irritation from pipe smoking. There is no specific cure. The treatment of leukoplakia divides itself into preventive and active measures. One should remove the known common causes. These include poor oral hygiene, such as poor dental alinement, accumulation of tartar and decay. Dentures must fit properly and be clean. Strong drinks and irritating foods that are too hot and highly spiced are agents which predispose to and aggravate the condition. Smoking is the commonest agent known to induce and continue leukoplakic changes of the mouth. An important part of any treatment regimen must depend on the complete interdiction of this habit. Most observers agree that half-hearted measures to discontinue the use of tobacco led to failure. The physician should be the patient's prop in the early trying days. He must be sympathetic and yet

induce courage by his forcefulness. The complete cessation of smoking leads often to surprisingly gratifying results. Simple mouth washes as with sodium perborate solution are useful.

Leukoplakia sometimes involutes or improves with the administration of vitamin A. The dose is from 50,000 to 150,000 units a day and should be continued for an extended period. Estrogenic substance is said to be of benefit, but this statement lacks sufficient verification. Use of estrogens should be attended with the caution that hormonal therapy in general deserves. Caustic agents such as silver nitrate are to be avoided. They are not curative but frequently produce damage. Cancer can supervene from their use. If a destructive method is desirable, this is best found in the use of actual cautery, electrocoagulation, fulguration or surgery.

Syphilis is said to be a sufficiently frequent factor in the production of leukoplakia to warrant careful search for its possible presence. Some consider that antisyphilitic therapy is warranted even though the results of blood serum tests and physical examinations are negative. It would seem, however, that there should be some definite support for such an attack above mere surmise.

Where the changes in the mucous membrane are smooth and the surface is intact with no tendency to bleed, conservative measures are apt to suffice and sometimes cure. Otherwise, active measures become necessary. It must be remembered that squamous cell cancer may be an end result in the thickened, fissured and bleeding forms of leukoplakia and calls for the radical measures appropriate for it. Radiation therapy is used by some, but effective doses are cauterizing. The majority of observers do not favor its use except in connection with cancerous degeneration.

ELECTROCARDIOGRAPHY

To the Editor:—Appreciating that theoretically unipolar electrocardiography is superior to bipolar or standard studies, can it be expected that the former will generally replace the latter? Other than for correlative study is there a sound reason for routinely recording both standard and unipolar limb leads? Are most progressive cardiac clinics and medical services employing unipolar studies at present?

Felix Oroblewski, M.D., Brooklyn.

ANSWER.—The present controversy about unipolar leads does not concern the desirability of using true unipolar leads. All authorities agree that a truly unipolar lead is highly desirable. At present there is considerable argument over the present technic of taking unipolar leads. One school of thought led by Wilson maintains that the central terminal used for taking these leads has a potential close enough to zero to permit the recording of leads which are for all practical purposes unipolar. The opposing school of thought led by Wolferth maintains that the central terminal is not of zero potential and that the leads recorded are not true unipolar leads. This problem has not been settled and until it is unipolar leads will not replace bipolar leads. When it becomes possible to prove that electrocardiographic leads can be made unipolar, bipolar leads will become entirely superfluous. Until that time many electrocardiographers are using the so-called unipolar leads in order to gain experience with them.

It is not within the scope of this communication to list the advantages of unipolar leads, nor can the question about the progressiveness of clinics using these methods be answered.

SULFAMERAZINE

To the Editor:—Kindly supply information on rashes following medication with sulfamerazine; data in relation to method of administration; dosage, and possible toxic effects.

M.D., Pennsylvania

ANSWER.—Many of the rashes attributable to other sulfonamide compounds have followed the administration of sulfamerazine. These rashes include generalized erythema, maculopapular eruptions, purpura, erythema multiforme, erythema nodosum-like lesions and, rarely, an exfoliative type of dermatitis. In one large clinic the incidence of rashes with sulfamerazine was no greater than that associated with sulfadiazine and less than that following the administration of sulfathiazole.

For systemic bacterial infections the oral dose of sulfamerazine for small children is ½ to 1 grain (0.0325 to 0.065 Gm.) per pound of body weight in twenty-four hours. For adults an initial oral dose of 3 to 4 Gm. is followed by 1 Gm. every six hours. The sodium salt of sulfamerazine may be utilized for intravenous administration. It is desirable that the patient maintain an alkaline urine while sulfamerazine is being administered, and for this purpose sodium bicarbonate may be employed in a total daily amount of 12 to 14 Gm. given in divided doses. The total output of urine should be observed closely.

The toxic effects of sulfamerazine are similar to those encountered with sulfadiazine and other sulfonamide drugs and include renal complications such as hematuria, oliguria, pain and anuria. This last potentially dangerous complication can be prevented to some extent by alkalinization of the urine and the administration of adequate fluids. Blood dyscrasias such as granulopenia and agranulocytosis occur rarely, usually after the drug has been administered for two or more weeks. Rashes may appear but subside shortly after the discontinuation of therapy. Febrile episodes may indicate toxicity.

Sulfamerazine has about the same therapeutic advantage as sulfadiazine and is no more toxic than the latter. Blood concentration of sulfamerazine are maintained for longer periods than those which are obtained with equivalent doses of sulfadiazine. This indicates that sulfamerazine can be given at less frequent intervals, which is a distinct therapeutic advantage, especially in children.

NEUROLOGIC SYMPTOMS FOLLOWING INJECTION OF MERCURIAL

To the Editor:—Following up the discussion of the subject "Neurologic Symptoms Following Injection of Mercurial" (THE JOURNAL, Oct. 11, 1947, p. 396) and Dr. A.H. Ulm's note (February 7, 1948, p. 434) in Queries and Minor Notes, it has been my observation in many older, hypertensive arteriosclerotic persons that the symptoms of numbness, tingling and especially the cramping of the posterior lower leg muscles will occur if the dose of the mercurial compound is too large. I tried to explain this to myself on the hydrodynamic theory, because it only happened a number of hours after the administration of the mercurial and only after adequate diuresis or more than adequate diuresis. The pain is similar to the muscle cramp of intermittent claudication but will occur at rest also, and all the sooner if the patient is on his feet and walking. I have never had this complaint from a female patient. Physicians had all better learn that an ampule's content of 2 cc. does not mean that the dose is 2 cc. Does one administer the full 1 cc. of epinephrine in an attack of bronchial asthma just because the ampule contains 1 cc.?

Robert R. Schwartz, M.D., Bronx, N.Y.

MEDICATION FOR PINWORM DURING PREGNANCY

To the Editor:—The answer in THE JOURNAL, Feb. 7, 1948 page 434, on the subject "Medication for Pinworm during Pregnancy" is incomplete. The most efficient drug for eradication of pinworms is gentian violet tablets with water-soluble coating. The adult dose is 1 grain (60 mg.) three times a day one hour before meals for eight days, followed by a seven day rest period. The treatment is then resumed for another eight day cycle. For children 15 or under, the schedule is the same with a dose of 10 mg. of gentian violet per day per year of age. Hexylresorcinal is also effective but in a much larger dose than recommended in the aforementioned article. For an adult, the contents of one vial, a total of 1 Gm. of the drug, are taken at one time, to be repeated in a week if needed. Enemas of 1:1,000 hexylresorcinol, approximately a quart being used at a time, are also beneficial. Frequent repetitions of therapy are often required, since reinfestation is rather common.

Sam F. Hartman, M.D., Maplewood, La.